Application for an Order Granting Development Consent
Dean Moor Solar Farm

Local Impact Report

26 August 2025

Project: Dean Moor Solar Farm

Site: Land at Dean Moor

Applicant: FVS Dean Moor Limited

Contents

1. Introduction

1.1 This Local Impact Report ("LIR") has been produced by Cumberland Council ("the Council") in response to the Dean Moor Solar Farm development ("the proposed development"). The proposed development is being progressed by an application for Development Consent by FVS DEAN MOOR LIMITED ("the Applicant").

1.2 Under Section 60 of the Planning Act 2008, Local Planning Authorities are invited to submit a LIR as part of the DCO process. Section 60(3) of the Act defines the LIR as 'a report in writing giving details of the likely impact of the proposed development on the authority's area (or any part of that area)'.

1.3 The Council understands that the primary purpose of the LIR is to identify any potential local impact of the proposed development and identify the relevant local planning policies insofar as they are relevant to the proposed development, and the extent to which the proposed development accords with the policies identified. The LIR does not assess the compliance of the proposed development with national planning policy or guidance.

1.4 The content of the LIR is a matter for the local authority concerned as long as it falls within this statutory definition but is a means by which the impacts and their significance are presented, with the Examining Authority ("the ExA") undertaking a balancing exercise, in the consideration of such impacts.

1.5 The Council has had regard to the purpose of the LIR as set out in Section 60(3) of the Planning Act 2008 (as amended) and the Planning Inspectorate's Advice for Local Authorities in preparing this LIR.

1.6 Topic based headings set out how the Council considers the proposed development accords with relevant planning policy and any potential local impact of the development. These headings are a combination of the matters raised in the Council's Relevant Representation and topics considered in the Environmental Statement submitted with the application.

2. Scope

2.1 The Proposed Development comprises the construction, operation, and decommissioning of a solar photovoltaic ('PV') energy generating station with total capacity exceeding 50 MW comprising solar PV arrays, grid connection infrastructure, associated infrastructure, and green infrastructure. It is anticipated to have the potential to export up to 150MW of energy at any one time based on the EN connection agreement. The primary purpose of the Proposed Development is to generate clean renewable energy to contribute to the urgent need to decarbonise the UK's energy supply.

2.2 The Proposed Development will be located on approximately 276.5 hectares ('ha') of land between the villages of Gilgarran and Branthwaite in West Cumbria, as shown in the Environmental Statement: Chapter 1 – Figure 1.1 Site Location Plan.

The Proposed Development will be within the Order Limits (the land shown on the Works Plan [REF: 2.3]) within which the Proposed Development can be carried out. The extent of the Site is the same as the Order Limits.

2.3 A full description of the proposed development is provided in Environmental Statement 3.4 (Development Components). Also see Table 3.1 Work Numbers for the proposed Development. The principal components of the Proposed Development Comprise of: Solar PV panels; Solar PV array mounting structures; Power Conversion System ('PCS') in the form of inverters and transformers; Grid Connection Infrastructure comprising Customer and DNO Substation Buildings and external electrical equipment within a security fence; Perimeter fencing, gates, CCTV, electrical cabling, and other associated infrastructure; Access from the highway and internal access tracks; and Green Infrastructure including landscape planting and ecological enhancements and temporary construction compounds.

3. Description of the Area

3.1 The proposed development lies wholly within the Council's administrative area and is located in the northwest of England and is bordered to the west by the Solway Firth and the Irish Sea, and to the north by the Solway and Scotland. To the east is the Lake District National Park. The Proposed Development sits entirely within the Parish of Dean and is surrounded by four primary population centres: Dean village and Branthwaite village to the north-east, Gilgarran village to the west, and Distington to the north-west

3.2 This Local impact report (LIR) relies upon the Applicant's description of the site and surrounding area as set out in ES March 2025 Chapter 3 – Site and Proposed Development Description. Characteristics of note are discussed in the following assessment where appropriate.

3.3 For ease of reference, the Site is divided into four areas referred to as Areas 'A', 'B', 'C', and 'D' as shown on ES Figure 3.1.

- Area A – Land south of Branthwaite Road (approximately 40.3ha);
- Area B – Land south of Branthwaite Road and north of Gilgarran Road (also known as locally as Collingate Road) (approximately 19.9ha);
- Area C – Land south of Gilgarran Road and north of Dean Cross Road (approximately 203ha); and
- Area D – Land connecting Areas A and B, including Potato Pot Wind Farm (the 'Wind Farm'), Gilgarran Road between Areas B and C, and Branthwaite Edge Road (approximately 13.4ha).

4. Relevant Planning History

4.1 The LIR relies on the Applicant's list of relevant planning history relating to the site and surroundings in the Planning Statement (ES) Relevant Planning History.

5. Cumulative Impacts

5.1 A List of Cumulative Schemes is set out in ES Table 2.6 Cumulative Schemes.

The Council has since supplied an updated list of sites which is currently being reviewed by the Applicant.

5.2 The Site is adjacent to the potential 'Lostrigg Solar' proposals. It is at the northwest of the Site, along Branthwaite Road. The Lostrigg Solar scheme is to be pursued in the future under the Town and Country Planning Act as a planning application.

5.3 The Council reserves its position to make more detailed commentary on cumulative effects, explaining that whilst not committed developments at that point, one other substantial solar farm may progress within the Borough (and into neighbouring authorities.

6. Legislative and Policy Context

6.1 The legislative basis for the proposed development is set out within the Planning Act 2008, which defines the process under which consent for Nationally Significant Infrastructure Projects are determined. The details have identified and considered the relevant legislation and guidance and is set out in the ES 1.7 and 1.8.

6.2 In accordance with Section 104(2)(d) of the Planning Act 2008, the NPPF is capable of being "important and relevant". Paragraph 5 of the NPPF states that the Framework does not contain specific policies for nationally significant infrastructure projects and that applications for NSIP are determined in accordance with the decision-making framework in the Planning Act 2008 (as amended) and relevant national policy statements for major infrastructure, as well as any other matters that are relevant (which may include the NPPF).

6.3 The NPPF does, however, state that the planning system should support the transition to net zero by 2050 and take full account of all climate impacts including overheating, water scarcity, storm and flood risks and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure (paragraph 161).

6.4 Whilst not determinative under the Planning Act 2008, the ExA can consider other important and relevant matters, including local planning policy. As of 1 April 2023, Allerdale Borough Council ('ABC') merged with Copeland Borough Council, Carlisle City Council and Cumbria County Council to become Cumberland Council (the 'Council'), which is now the administrative authority within which the Site is located. The Site is located within the former administrative boundary of ABC. For the purposes of section 38(6) of the Planning and Compulsory Purchase Act 2004, the development plan in force for Cumberland (Allerdale area) comprises:

- **Allerdale Local Plan Part 1 adopted July 2014 (ALPP1)**
- **Allerdale Local Plan Part 2 adopted July 2020 (ALPP2)**

6.5 It is noted that the ES in 1.9.3 sets out the Council position with regard to the Allerdale Borough Council (ABC) Action Plan to address climate change.

6.6 The Council as a statutory consultee when any Development order is made is required to prepare a Local Impact report and consider the Local Plan and any other representations the Council makes.

6.7 Allerdale Local Plan contains the Councils planning policies for the use and development of land up to 2029. The Local Plan is made up of Part 1 and Part 2. To ensure a comprehensive approach to sustainable development it is important that the Local Plan (both parts) are read together and used as a whole. The first part of the plan sets out the level of growth, spatial strategy and strategic and development management policies. These are arranged thematically covering: Housing; Economy; Sustainable Communities and Infrastructure; Built and Historic Environment; and the Natural Environment.

6.8 Part 1 of Allerdale's Local Plan was adopted in July 2014. This sets out a clear vision of what the Council wants to achieve and how areas should be shaped. It acts as an overarching framework by setting out the general priorities for action, addressing key issues facing Allerdale. The Local Plan (Part 1) sets out the spatial strategy in terms of identifying the settlement hierarchy and the roles of each tier in providing the general scale and location of new development. The Local Plan (Part 2) ensures that sufficient land is available in appropriate locations to deliver the development requirements and policies set out in the Local Plan (Part 1).

6.9 ALP2 provides the Policies Map (formally known as the Proposals Map) and is a spatial representation which identifies areas within Allerdale that are subject to various policies and proposals within the Local Plan. It shows where sites are identified for certain uses and where different policies apply. The Policies Map must be used in conjunction with the Local Plan.

6.10 The Council Priorities and Local Plan Policies relevant to this proposal are set out below.

Corporate Priorities for the Council

6.11 The Council wants to enable the move to an economy that builds and retains wealth locally in order to ensure that local communities receive the social and economic benefits associated with sustainable economic development and investment to address local inequalities.

6.12 The Council Plan "sets out clearly our commitment to supporting local economies that work for everybody, and the importance of community wealth building approaches to maximise the benefits for economic growth for all parts of our local community." This is one of the key priorities of the Council when seeking a Mayoral Combined Authority through Devolution.

6.13 One way to do this is to use the area's assets as a catalyst for appropriate economic activity, generating opportunities for residents; this can include the natural

assets of the area as the Council wants to support the growth of a low carbon economy.

6.14 However, there needs to be appropriate training opportunities in place to support the transition to ensure that local people have the skills to support the transition to a strong, inclusive and green economy. This links to Strategic Objective SO3g of the Local Plan which states that the Council wants to improve educational attainment and skills to meet the needs of existing and future employment opportunities.

Vision

6.15 Strategic expectations for the area include:

- Economic growth will be supported in a number of sectors, including capitalising on skills and opportunities in the energy sector;
- However, there is also support to develop the tourism sector so it is key that any economic development so does not affect the landscape quality that people come to visit;
- Allerdale will have unspoilt landscape.

6.16 **Strategic Objectives Policies**

SO1a Reduce Allerdale's carbon footprint and support a low carbon future;

SO1f Promote renewable and low carbon energy production in the Plan Area;

SO1g Sustainable and effective use and re-use of land and buildings and protect the most versatile agricultural land from development;

SO3a Diversify the urban and rural economic base of Allerdale to enable a prosperous mixed, low carbon economy, including creative knowledge-based industries, specialist engineering, energy and tourism sectors;

SO3d Provide a wide range of modern, high quality employment sites and premises to meet existing business needs and emerging sectors;

SO5a Ensure that all new development meets high standards of quality of design, energy efficiency, safety, security and accessibility, and relates well to existing development, enhances the public realm and develops locally distinctive and high quality places;

SO5d Enhance green infrastructure by developing a comprehensive network of high quality open space such as parks, woodlands, gardens, natural green spaces and allotments;

SO5e Minimise the risk from flooding and support the incorporation of mitigation measures as part of the overall design solution;

SO5f Protect and enhance the quality of the environment and amenity;

SO6a Protect and enhance the natural and historic landscape, including ancient woodland and geological assets, from unnecessary and harmful development, particularly within the Solway Coast AONB and areas adjoining the National Park;

SO6b Protect and enhance biodiversity and geodiversity, notably the Natura 2000 sites and create ecologically diverse habitats across Allerdale and ensure the ability of habitats and species to adapt to climate change;

SO6d Ensure high levels of water, and air quality are retained and where necessary improved, and safeguard agricultural land.

Allerdale Local Plan Part 1 adopted June 2014

- **Policy S1: Presumption in Favour of Sustainable Development.**

When considering development proposals, the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework.

- **Policy S2: Sustainable Development Principles**

The Council will:

- Support the rural economy by encouraging appropriate new economic opportunities, expanding business, new methods of working, together with traditional industries and farm diversification
- Encourage the development of renewable or low carbon energy resources in appropriate locations given the potential wider environmental, community and economic benefits
- Ensure development (either cumulatively or in isolation) will not harm highway safety and does not exceed the capacity of the local transport network
- Reduce Allerdale's carbon footprint and support a low carbon future
- Minimise the impact on natural resources by promoting renewable or low carbon energy and avoid sterilisation of mineral resources
- Promote high standards of design that make a positive contribution to the local area and ensure that, wherever possible, existing natural, historic and environmental assets are enhanced and in all circumstances conserved
- Ensure that potentially unstable land resulting from historic mining operations is identified, assessed and addressed appropriately;
- Ensure the efficient use of land and infrastructure, encouraging the reuse of previously developed land that is not of high environmental value
- Ensure that landscape character and local distinctiveness is protected, conserved and wherever possible enhanced
- Ensure the use of Sustainable Drainage Systems (SuDS) is explored and implemented wherever possible
- Support local food production and farming to reduce the area's food miles by avoiding significant development on the best and most versatile agricultural land where possible

- **Policy S3: Spatial Strategy and Growth**

Paragraph 66 – In an exception to the spatial strategy, Policy S3 allows for certain types of development in the open countryside and villages/hamlets not named in the above hierarchy. The specific cases are listed in the policy and further detail provided throughout the Local Plan.

Proposals outside of defined settlements will be limited to:

c. An appropriate diversification of an existing agricultural or land based activity

j. Other development requiring a countryside location for technical or operational reasons.

- **Policy S4: Design Principles**

Proposals for all new development (including conversions, extensions and alterations) will therefore be required to demonstrate high standards of design and must:

- Be visually attractive, of appropriate scale and appearance;
- Respond positively to the character, history and distinctiveness of its location and integrate well with existing development;
- Enhance, protect and integrate effectively with the historic and natural environment;
- Function well by ensuring suitable standards of access and amenity are achieved and maintained in relation to the development itself and the local area;
- Safeguard environmental quality and the amenities of occupiers of both proposed and existing property;
- Incorporate sustainable construction methods that reduce energy consumption and allow for future adaptation in response to changing life needs;
- Optimise the potential of the site by ensuring appropriate density and mass of development and considering, where appropriate, mixes of use that might be incorporated, such as green and other public space. These should be considered in the context of the identified needs of the area.

- **Policy S14: Rural Economy**

Farm Development In order to support the continued economic viability of farming and other land based enterprises, the Council will support proposals;

a) For the diversification of activities that are of a scale and nature appropriate to the location;

b) For appropriately designed and related agricultural development and buildings. In all cases development should not have significant adverse effect on nature

conservation features, biodiversity and geodiversity, including Natura 2000 sites, habitats and species, and should accord with all other plan policies.

- **Policy S15: Education and Skills**

d) Enhancing enterprise and training and skills for the local workforce by working in partnership with education facilities and employers to promote lifelong learning and skills development

- **Policy S19: Renewable Energy**

The Council will seek to promote and encourage the development of renewable and low carbon energy resources given the significant wider environmental, community and economic benefits. Proposals where impacts (either in isolation or cumulatively) are, or can be made acceptable will be permitted.

The Council will take a positive view where;

a) Proposals (either in isolation or cumulatively);

i) Do not have an unacceptably adverse impact on the amenity of local residents (such as air quality/emissions, noise, odour, water pollution, shadow flicker);

ii) Do not have significant adverse impact on the location, in relation to visual impact and impact on the character and sensitivity of the surrounding landscape;

iii) Do not have an adverse effect on any European/International protected nature conservation site (including SACs, SPAs and Ramsar sites, candidate SACs, potential SPAs and proposed Ramsar sites) including its qualifying habitats and species, either alone or in-combination with other plans or projects.

iv) Do not have a significant adverse effect on any National nature conservation site (Site of Special Scientific Interest; National Nature Reserve), except where the benefits of the development clearly outweigh both the impact on the site and any broader impacts on the wider network of National sites.

v) Do not result in loss or harm to a Local nature conservation site, including habitats or species supported by Local Sites, unless it can be demonstrated that there is a need for the development in that location and that the benefit of development outweighs the harm or loss.

iv) Do not have unacceptably adverse impact on heritage assets and their settings;

c) Appropriate operational requirements are addressed (including accessibility and suitability of road network, ability to connect to the grid, proximity of any relevant feedstock);

d) Appropriate measures are included for the removal of structures and the restoration of sites, should sites become non-operational; e) Potential benefits to the local economy and the local community, including agriculture and other land based industries are considered.

Renewable energy proposals are expected to provide supporting evidence including landscape, visual and environmental assessments and to demonstrate that any negative impacts have been made acceptable. Where mitigation is required to make impacts acceptable these will, where necessary be secured through Planning Obligations. Developers will be expected to work with local communities from an early stage and deliver benefits to the local area where the proposal is located.

- **Policy S20: Nationally Significant Infrastructure Projects**

The Council will actively engage from the pre-application stage with the developer of a Nationally Significant Infrastructure Project to ensure:

a) A robust programme of community consultation with the local community and stakeholders is achieved;

b) That appropriate mitigation measures are considered to reduce the potential impact on the day-to-day activities of the local community and businesses as a result of the proposed development. This would include the impact on local infrastructure and services;

c) That, where appropriate, the developer locates any temporary workers in the Principal or Key Service Centres close to services and public transport routes, reflecting the Local Plan Policies and Site Allocations;

d) Sustainable forms of transport will be encouraged to move construction materials and workers during construction, operation and decommissioning;

e) The maximisation of the local socio-economic opportunities for the West Cumbrian economy in terms of increased training and employment opportunities, improvements to local infrastructure and the development of local business opportunities.

The Council will, where appropriate, prepare and submit a Local Impact Report to the Major Infrastructure Planning Unit as part of the Development Consent Order process. It will seek to assess both positive and negative impact on local communities, jobs and businesses, infrastructure and the natural and historic environment.

- **Policy S21: Developer Contributions**

The Council will work with partners to deliver infrastructure, services and community facilities to improve the sustainability of its communities. In accordance with the provisions set out within national policy, the Council will require new developments to secure infrastructure improvements which are necessary to make the development acceptable by planning condition or obligations.

Planning obligations may also be required for the initial and ongoing running and maintenance costs of services and facilities, and to compensate for the loss or damage caused by the development.

- **Policy S22: Transport Principles**

All new development in the Plan Area will:

a) Be required to improve accessibility and movement in the local area reflecting the Local Transport Plan;

b) Ensure they can be accessed safely and that they do not compromise the safety of any transport route, including railway lines and level crossings;

e) Make provision for pedestrians and cyclists to be given the highest priority within town centres and new development, and facilitate links with public transport nodes and hubs;

f) Where necessary be accompanied by Transport Assessments/Travel Plans in accordance with local and national guidance;

g) Protect and, where appropriate, enhance or create new designated public rights of way;

i) Be required to protect, enhance and capitalise upon sustainable transport links offered by green infrastructure corridors wherever possible;

j) Be required to provide adequate levels of car parking, cycle facilities, and where appropriate incorporate charging points for electric and hybrid vehicles.

- **Policy S24: Green Infrastructure**

The Council will promote the creation, enhancement, maintenance and protection of a range of green infrastructure assets that contribute to a diverse network of natural and man-made green and blue spaces, links, habitats and landscapes, which is accessible to all. The Council will work with partners and developers to:

a) Promote high quality, attractive places which allow everyone to enjoy direct and regular contact with the natural environment;

b) Seek to ensure green infrastructure is woven into new development wherever possible;

c) Protect, manage, enhance and create key natural and semi-natural habitats and wildlife corridors, including watercourses, wetlands, woodlands (including ancient woodland and trees) and parklands;

d) Seek to alleviate open space deficiencies in existing communities whilst ensuring all new open space provision is high quality, attractive and safe;

e) Promote design and management of parks and natural green spaces to increase biodiversity and maximise their function as nature reserves;

f) Promote health and fitness through provision of open space and opportunities for community involvement in outdoor exercise, sport and active recreations;

g) Encourage use of street trees, where appropriate, to define streets, improve the urban environment and provide linkages in habitat networks;

h) Promote creation of multi functional habitat networks, such as communal / private courtyards, pocket green spaces and green buildings, which are responsive to a range of microclimatic conditions and provide an experience of nature on people's doorstep;

i) Seek the creation of new and enhanced links and corridors between towns and settlements such as cycle ways and footpaths;

j) Promote improvements in air, water and soil quality and more sustainable drainage and flood mitigation solutions;

k) Seek the protection and rehabilitation of landscapes and habitats damaged or lost by development or land management practices;

l) Maximise opportunities to enhance and create assets which have the potential to attract visitors, create employment and attract investment to the area;

m) Explore the potential of existing and new green infrastructure assets to provide opportunities for renewal energy schemes;

- **Policy S25: Sports, Leisure and Open Space**

Paragraph 256. A key priority of the Council is to promote healthy lifestyles through improved access to sports, leisure and open space, which also have positive economic and environmental benefits. Improved access can be achieved not only by improving the provision and quality of existing sports and leisure facilities, but by promoting opportunities to enjoy outdoor recreational activities, open spaces and the countryside.

f) By ensuring the ongoing protection and improvement of both new and existing provision through appropriate management and maintenance arrangements;

- **Policy S27: Heritage Assets**

The historic environment including all heritage assets and their settings will be conserved and enhanced in a manner appropriate to their intrinsic historic value and significance, their importance to local character, distinctiveness and sense of place, and to other social, cultural economic or environmental benefits/values.

The Council will work with partners to seek the conservation and enhancement of all designated or non-designated heritage assets within the Plan Area.

- **Policy S29: Flood Risk and Surface Water Drainage**

Developments should be avoided in locations that would be at risk of flooding or where it would increase the level of flooding elsewhere. Development within areas at the greatest risk of flooding, as identified within the Allerdale Strategic Flood Risk Assessment (SRFA) and/or Lead Local Flood Authority (LLFA) Local Flood Risk Management Strategy, will be strongly resisted.

The Council will expect all developers to demonstrate that they have separated surface water from foul drainage to remove pressure on foul drainage system. The Council expect the incorporation and/or retention of soft landscaping, permeable surfaces, water storage systems and infiltration systems (SuDS) to have been considered for all developments.

The Council will expect all new developments to defer to the drainage hierarchy, seeking to incorporate Sustainable Drainage Systems (SuDS) in preference to discharge to local watercourses or the main sewer. Proposals seeking to discharge surface water to local watercourses or the main sewer will normally be resisted, unless it can be demonstrated to the satisfaction of the Council that:

c) Local ground conditions render a SuDS system impractical; or

d) The cost of installation, maintenance and, where appropriate, operation would render the scheme economically unviable.

In circumstances where a SuDS system is deemed practical and viable, developers will be required to seek the approval of the SuDS Approval Body (SAB) and to submit a management plan outlining how the system will be maintained and managed in the long term. Developers will be required to enter into a planning obligation in order to secure the long term management responsibilities of the SuDS in perpetuity.

- **Policy S30: Reuse of Land**

Previously Developed Land (Brownfield) - In line with local regeneration and sustainability objectives, the Council will encourage and where appropriate prioritise the effective reuse of previously developed and vacant sites within the Plan Area. Proposals for windfall development on greenfield sites may be required to carry out a sequential test to demonstrate that there are no available previously developed sites, which are not of high environmental value, within the settlement that could suitably accommodate the scheme.

Contaminated and Unstable Land - For proposals for development of land where there is risk of potential onsite contamination or ground instability, an investigation into the quality of the land will be required. In circumstances where the proposal involves a site that is known to be contaminated or unstable, the Council will require an assessment to be submitted with the application. This must be carried out by a suitably qualified person to the current British Standards and in accordance with local guidance.

- **Policy S32: Reuse of Land**

Support will be given for proposals which make a positive contribution to the area by maintaining or improving the quality of the environment and amenity.

The development of new housing or other environmentally sensitive development will normally be resisted in locations where there is potential to incur statutory nuisance

or poor standards of residential amenity by virtue of impacts such as air pollution, noise, smell, dust, vibration, light or other pollution.

Proposals will not be supported where they would:

a. Result in pollution or hazards which prejudice the health and safety of communities and their environments, including nature conservation interests and the water environment which cannot be overcome by appropriate mitigation measures;

b. Result in a detrimental effect on the local area in terms of visual amenity, distinctive character or environmental quality;

c. Generate severe highway infrastructure or network problems in relation to access, road safety, traffic flow or car parking;

d. Have an unacceptable effect on residential amenity and surrounding land uses in terms of loss of privacy as a result of overlooking, or increased sense of enclosure as a result of overbearing development or a loss of sunlight/daylight received by the property as a result of overshadowing;

e. Cause significant adverse environmental impact in relation to landscape, biodiversity or geodiversity, cause pollution to the water environment or cause deterioration of the Water Framework Directive Classification Status;

f. Unduly prejudice the satisfactory development or operation of adjoining land and/or the development of the surrounding area as a whole.

- **Policy S33: Landscape**

The landscape character and local distinctiveness of the Plan Area shall be protected, conserved and, wherever possible, enhanced.

An assessment of the impact on the landscape character will be required for all major residential, commercial and industrial developments and may also be required for any other development which the Council considers may impact upon the landscape, particularly within sensitive or protected areas.

Cumbria Landscape Character Assessment Toolkit (or successor documents) will be used to inform the detailed assessment of individual proposals. Proposals for development should be compatible with the distinctive characteristics and features of Cumbria's landscape types and sub types. Proposals will be assessed in relation to:

a) locally distinctive natural or built features,

b) visual intrusion or impact,

c) scale in relation to the landscape and features,

d) the character of the built environment,

e) public access and community value of the landscape,

f) historic patterns and attributes,

g) biodiversity features, ecological networks and semi-natural habitats, and

h) openness, remoteness and tranquillity.

The Council will support proposals that involve the removal or a reduction in the impact of existing structures and land uses that are detrimental to the visual quality of the landscape.

- **Policy S35: Protecting and Enhancing Biodiversity and Geodiversity**

Conditions for biodiversity will be maintained and improved, and important geodiversity assets will be protected. Nationally and internationally protected sites and species will be afforded the highest level of protection. A high priority is also given to the protection of locally identified biodiversity or ecologically valuable assets. The Council will seek positive improvements to the quality of the natural environmental through sustainable development resulting in net gains for biodiversity across the Plan Area.

Developments, projects and activities will be expected to:

a) Protect and enhance key ecological habitats and wildlife corridors and stepping stones including watercourses and wetlands;

b) Maintain, and where appropriate enhance, conditions for priority habitats and species identified in the Cumbria and UK Biodiversity Action Plan Priority Species and habitats or the Cumbria Biodiversity Data Centre at Tullie House;

c) Maintain and where appropriate enhance recognised geodiversity assets identified in the Local Geodiversity Action Plan for Cumbria;

d) Protect soil and water resources in line with Policy S36;

e) Contribute to Allerdale's green infrastructure network in line with Policy S24;

f) Protect existing trees, hedgerows and woodland (including ancient trees and hedgerows) that are considered important to the local community, contribute positively to the character of the area and/or are of a nature conservation value.

Development that present significant economic or social benefits for the local community may be permitted where the Council, in consultation with relevant partner organisations are satisfied that any necessary impacts can be mitigated or compensated through appropriate habitat creation, restoration or enhancement on site or elsewhere secured via planning conditions, agreements or obligations. Where a development poses significant harm to an irreplaceable habitat which cannot be mitigated or compensated for, permission will be refused.

- **Policy S36: Air, Water and Soil Quality**

The quality of air and water resources within the Plan Area will be protected and opportunities for enhancement will be pursued.

Unless adequate mitigation measures can be secured, development proposals will be resisted that would have a demonstrable direct and/or indirect adverse impact on;

a) Air quality and/or atmospheric conditions;

b) The characteristics of surrounding soils and substrata - through either physical (compaction, erosion) or chemical (pollution, contamination);

c) The chemical composition and quality of waterbodies in the Plan Area;

d) The Water Framework Directive and the status of the watercourse.

Whilst having regard for the economic and other benefits of the best and most versatile land, where development is considered necessary, the Council will seek to ensure the use of poorer quality land in preference to that of a higher quality.

- **Policy DM5: Farm Diversification**

Proposals for the diversification of farm and other land-based enterprises will be permitted where:

a) The character, scale and nature of the proposal can be satisfactorily integrated into the rural landscape;

b) There is not a significant adverse effect on amenity, biodiversity and geodiveristy or Natura 2000 sites;

c) The development conserves and enhances the historic environment and historic assets;

d) The proposal forms part of a comprehensive diversification scheme and is operated as part of a sustainable farm or appropriate land-based enterprise and will contribute to making the existing business viable;

e) The proposal will not undermine viability of services within the settlement or retail hierarchy;

f) The proposal should make use of existing buildings wherever possible and where new or replacement buildings are required, the development is in scale with the surroundings and well related to any existing buildings on the site;

g) Effective measures have been agreed to address increased traffic movements.

Development should be of appropriate design, scale and appearance and should not be detrimental to the rural character of the area in terms of visual impact, traffic and other activity generated or other impacts.

- **Policy DM12: Sustainable Construction**

The Council will require all new development to mitigate against the impacts of climate change by seeking to achieve the highest levels of sustainability. Development proposals will be expected to:

a) Minimise the amount of surface water run off by incorporating measures such as Sustainable Urban Drainage systems (SuDS), permeable surfacing, water storage systems and green infrastructure;

b) Minimise the consumption of water by incorporating measures such as water efficiency and water harvesting/recycling devices;

c) Reduce carbon dioxide emissions and energy consumption through the use of construction materials that maximise energy efficiency and the incorporation of low carbon/renewable energy sources and by giving consideration to the orientation of buildings;

d) Consider use of construction products that minimise the impact o

the environment, such as locally-sourced and recyclable materials;

f) Minimise the level of environmental pollution and the impact on local ecological habitats and networks.

- **Policy DM14: Standards of Good Design**

The Council will seek to ensure that the design and layout of all new development creates neighbourhoods and areas with a sense of place, that are well integrated and compatible with existing development.

New development will be required to:

b) Respect and respond positively to the distinctive qualities of the location and integrate with the characteristics of the site, ensuring that all external materials and boundary treatments are appropriate to the design and distinctiveness of the development, site and location.

c) Development should take advantage of green infrastructure assets, topography, landscape and waterscape features, historic or biodiversity assets. Developers will be encouraged to retain existing features of interest within the site including trees, hedgerows, becks and streams.

e) Provide appropriate vehicular access, parking and turning arrangements and facilities for cyclists and pedestrians.

f) Make clear distinctions between public and private spaces, promote natural surveillance by ensuring routes and paths are overlooked and demonstrate the inclusion of measures to reduce the potential for crime and disorder.

Landscaping within Development

Development proposals will be required, where appropriate, to be accompanied by landscaping schemes in order to mitigate any visual impact and integrate the development into its wider surroundings. Where required landscaping schemes should form an integral part of the layout of development proposal, contributing positively to the provision of green infrastructure in the local area and, where possible, enhancing local biodiversity. Landscaping schemes will be expected to:

g) Retain existing trees, hedgerows, walls, fences, paving, and other site features which contribute to the character and amenity of the area;

h) Include appropriate soft landscaping (including tree and plant species, location, sizes and numbers) which respect the landscape characteristics of the site, its setting, and its potential effect on adjacent land uses;

i) Include appropriate hard landscaping including furniture such as seating and play equipment together with surface and boundary treatments, which respect the landscape characteristics of the site and its setting;

j) Maximise the nature conservation and biodiversity value of the development through the incorporation of hard and soft landscaping features that facilitate the creation of wildlife habitats.

k) Conditions will normally be imposed on any planning permission for developments proposals including landscaping schemes in order to ensure their timely implementation, which will typically be the first available planting season.

- **Policy DM17: Trees, Hedgerows and Woodland**

Wherever possible, existing trees, hedgerows and woodland that are considered important to the local community, contribute positively to the character of the area and/or are of nature conservation value will be protected.

Proposals that involve felling, removal or are considered likely to cause demonstrable harm to existing trees, hedgerows and woodland will normally be resisted, unless acceptable mitigation or compensation measures can be secured.

Felling and/or removal may be permitted in exceptional circumstances where it can be demonstrated that the economic viability of the development is prejudiced and there are proposed wider benefits that outweigh the loss incurred. However, where a development poses significant harm to an irreplaceable habitat which cannot be mitigated or compensated for, permission will be refused. Replacement planting that maintains local amenity, the character of the area and nature conservation interest will be required.

A tree or hedgerow survey will be required to accompany a planning application when trees or hedgerows are either present on the proposal site or are adjacent to it and are likely to influence or be affected by the development. Details required by tree and hedgerow surveys will be set out by the Council in a Local Validation Checklist.

<u>Cumbria Minerals and Waste Local Plan</u>

The site falls within a Minerals Safeguarding Area therefore the following policies will be relevant:

- **Policy SP8: Minerals Safeguarding**

Mineral resources, existing, planned and potential infrastructure and plant will be safeguarded from being unnecessarily sterilised by other developments by identifying: -

- Existing and potential railheads and wharfs to be safe-guarded;
- Mineral Safeguarding Areas for the indicative sand and gravel and hard rock resources (including aggregates, high specification aggregates, industrial minerals and building stones), shallow coal and fireclay resources;
- Mineral Safeguarding Area for identified resources of brick clay;
- Mineral Safeguarding Areas for the remaining gypsum resources;
- Mineral Safeguarding Area for identified resources of slate;
- Mineral Safeguarding Area for identified resources of secondary aggregates;
- Mineral Consultation Area, which covers the resources within all the Mineral Safeguarding Areas.

- **Policy DC15: Minerals Safeguarding**

The Mineral Planning Authority will safeguard those mineral resources that are shown on the Policies Map. Within those areas, the Mineral Planning Authority should be consulted by the Local Planning Authorities on any planning applications they receive for non-minerals development that would be likely to affect the winning and working of minerals.

All non-minerals development proposals within the Mineral Safeguarding Area should extract any viable mineral resources present, in advance of construction. Proposals for non-mineral development within the Mineral Safeguarding Areas that do not allow for the prior extraction of minerals will only be permitted where:

1. the need for the development outweighs the need to extract the mineral; or

2. it can be clearly demonstrated that it is not environmentally acceptable or economically viable to extract the mineral prior to non-mineral development taking place; or

3. it can be clearly demonstrated that the mineral is either not present or of no economic value or would lead to land stability problems or is too deep to extract in relation to the proposed development; or

4. the development would not prevent minerals extraction taking place in the future; or

5. the development within the Mineral Safeguarding Area is exempt, as set out in the exemption list in Table 15.1.

All of the Mineral Safeguarding Areas together, are contiguous with the Mineral Consultation Area.

7. Principle of Renewable Energy, Impacts on Climate Change

7.1 Allerdale Local Plan Part 1 Policy S3 Spatial Strategy and Growth, sets the framework for development across the Plan Area, outlining the Council's approach to scale, location and distribution of growth. It defines the settlement hierarchy, which sets the role of settlements, including the form and the scale of development that would be expected in towns and villages and what is acceptable in open countryside.

Proposals outside of defined settlements will be limited to certain criteria. Policy S3 criteria's c) and j) are deemed relevant. Criteria c) An appropriate diversification of an existing agricultural or land based activity and Criteria j) Other development requiring a countryside location for technical or operational reasons.

7.2 Policy S19 Renewable Energy and Low Carbon Technologies sets a positive framework for the development of renewable energy across the Plan Area reflecting both national planning policy and local evidence. In order to ensure that only appropriate development takes place, Policy S19 adopts a criteria-based approach to encourage acceptable proposals to come forward to meet national renewable energy targets.

7.3 Policy S20 Nationally Significant Infrastructure Projects sets out that the Council will engage at pre application stage to ensure community consultation with the local community and stakeholders, appropriate mitigation measures are considered, sustainable transport is encouraged and that there will be the maximisation of local socio-economic opportunities for the West Cumbrian economies in terms of training and employment opportunities.

8. Site Selection and Assessment of Impacts

8.1 The Proposed Development has been informed by a series of technical assessments and consultation with the Council, prescribed consultees, the local community, and other stakeholders. The Proposed Development is considered against the environmental topics, and against the relevant local planning policy context.

8.2 The ES in Para.6.3.10 sets out that the background to the Proposed Development's site selection as it relates to the ES is set out in ES Chapter 4 - Alternatives and Design Evolution [REF: 6.1]. This provides an account of the reasonable alternatives that have been considered in developing the siting and design of the Proposed Development in accordance with the EIA Regulations. It sets out the main reasons for the chosen 'Site', considering environmental, social, and economic effects, as well as technical and commercial feasibility. It is concluded that overall, the Site has been established to be appropriate to accommodate an NSIP solar farm, based on its environmental and technical characteristics, and is responsive to constraints (including mitigation opportunities).

8.3 This appraisal is informed by the assessment described within the ES and supporting technical reports. The Scoping Opinion was adopted by the Planning Inspectorate dated 14 September 2023. The themes considered are as follows:

- Land Use and Soils;
- Cultural Heritage;
- Landscape and Visual;
- Ecology and Biodiversity;
- The Water Environment and Flood Risk;
- Transport and Access;
- Climate Change

- Socio-Economics
- Cumulative Effects

8.4 This section of the LIR identifies the relevant local planning policies and how the application accords with them or otherwise. It also considers the adequacy of assessment for each identified subject area and concludes whether the impacts will be positive, negative or neutral. The extent to which the Applicant has addressed identified impacts and assessed them adequately, complying with local planning policy, is also considered.

8.5 In assessing the local impacts of the proposed development, the Council has drawn on the expertise of both relevant qualified officers of the Council itself (on matters pertaining to cultural heritage, trees, employment, transport, access and public rights of way) and external professional consultants (ecology and biodiversity on landscape and visual impact and glint and glare impacts) to ensure that a suitably qualified response, based on local knowledge and expertise, is provided on each of the issues. Each local impact is considered in turn below.

8.6 Certain topics were scoped out by the Planning Inspectorate through their scoping opinion (ES Appendix 2.3) or by additional information being provided at the PEIR stage to justify the scoping out of these topics.

8.7 Topics Scoped Out are as follows: Agricultural Land (scoped out as a standalone chapter); Soils (scoped out as a standalone chapter); Water Resources and Flood Risk (scoped out as a standalone chapter); Air Quality; Traffic and Access; Noise and Vibration; Major Accidents and Disasters (scoped out as a standalone chapter); Electric Magnetic and Electromagnetic Fields; Telecommunications, television reception, and utilities; Wind Microclimate; Daylight, Sunlight and Overshadowing; Waste; Minerals; Lighting (scoped out as a standalone chapter).

9. Land Use and Soils

9.1 It is noted that Agricultural land and Soils was scoped out as a stand alone chapter within the ES, however the Best and Most Versatile (BMV) Agricultural Land and Soils were scoped in as a matter of consideration. Chapter 10 of the ES considers Ground conditions and Chapter 7 of the ES regards Landscape and Visual. In terms of Agricultural Land Use and Soils, the local plan policy context is set out below.

9.2 Policy S2 (ALPP1) Sustainable Development Principles is relevant. It is acknowledged that the Council will support local food production by avoiding development on the best and most versatile agricultural land where possible. ALPP1 Paragraph 329 sets out that land quality varies from place to place. The Agricultural Land Classification (ALC) provides a method for assessing the quality of farmland to enable informed choices to be made about its future use and thus helps underpin the principles of sustainable development. The ALC system classifies land into five grades, with Grade 3 subdivided into Subgrades 3a and 3b. The best and most versatile land is categorised as Grades 1, 2 and 3a. This is the land which is most flexible, productive and efficient in response to inputs, and which can best deliver

crops for food and non-food uses. The Council will ensure that the best and most versatile land is safeguarded wherever possible from development.

9.3 The NPPF at paragraph 187 recognises the economic and other benefits of the best and most versatile agricultural land. Footnote 65 within paragraph 188 of the NPPF requires where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality. There is a clear direction in national policy for solar farms to be located on brownfield and lower grades of agricultural land, which recognises the importance of balancing the need for sustainable energy whilst ensuring BMV is available for food production.

9.4 The proposal is for the solar farm to operate for term of 40 years (ES 2.3.10). It is noted that the soils from construction and decommissioning should be avoided or minimised. In the Scoping response the Inspectorate recommended that a Soil Management Plan is provided with the application and appropriately secured via the DCO. Policy DM5 Farm Diversification sets out that proposals for the diversification of farm and other land based enterprises will be permitted subject to set criteria. The scheme is considered to accord with this Policy.

9.5 On balance subject to suitable mitigation secured in the DCO Agricultural Land and Soil within the site should be suitably safeguarded. The scheme accords with the relevant local plan policies given the site is not in an area of high-quality agricultural value but is identified as poor. It is acknowledged that the site has had remediation following previous opencast mining activities.

10. Cultural Heritage

10.1 Allerdale's historic environment contributes enormously to its economy and to its attractiveness as a place to live and therefore to the quality of life of its residents and workforce. Its historic environment attracts many tourists and visitors to the district and as such its conservation and enhancement is very important to the local economy.

10.2 In assessing the impact of the proposed development on built heritage, the Council has had regard to ES Chapter 6: Cultural Heritage and accepts the methodology and conclusions of the assessment of effects in respect of built heritage. There has also been collaboration with other relevant chapters (notably landscape and visual and the setting of heritage assets). The analysis is accepted and demonstrates a screened scenario accounting for features such as existing vegetation and other forms of screening which provide additional filtering and reduction of theoretical visibility. Visibility is typically focused within short range views (~1km) from the Site.

10.3 Cultural Heritage Receptors that are 'scoped in' are set out in Table 6.7 and these are accepted.

10.4 Heritage receptors can include above and below ground archaeological remains, historic buildings/ built environment, and/or historic landscapes, and different criteria are provided in the DMRB for establishing a 'value' for each of these

receptors, each heritage receptors are ascribed a value in accordance with a four-point scale as shown in Table 6.1.

10.5 In determining applications that could affect the significance (including character, appearance, historic value, value to people and setting) of a heritage asset and/or archaeological asset, the following factors have to be taken into account: The level of significance of the heritage asset(s) and the impact of the proposal on the significance (including setting) of the heritage asset(s); how the significance and/or setting of the asset could be better revealed and opportunities for mitigating climate change without damaging significance. The assessment is accepted.

10.6 The Study Area comprising the land within the Site and a 3km buffer from the Site boundary used to assess designated heritage receptors (as shown in ES Figure 6.1) is accepted. It is noted that the Scoping Report for the Proposed Development (Appendix 2.1) included proposed methodologies for assessing archaeology and built heritage in the ES. The Planning Inspectorate's Scoping Opinion (Appendix 2.2) identified further receptors to be considered for determining 'significant' effects and these have been considered. The Zone of theoretical visibility (ZTV) for the Proposed Development is shown in Figure 6.3 and for the purpose of assessing Cultural Heritage this is accepted. A series of ZTV analysis has been undertaken based upon the design parameters that are listed in Chapter 3 – Site and Development Description [REF: 6.1]. The ZTV calculation is performed using particular geographic information systems ('GIS') software (ESRI ArcGIS Pro 3.0.2) under the Viewshed Spatial Analyst tool.

10.7 Table 6.4 lists the heritage receptors located within the 1km Study Area for non-designated receptors and within the 3km Study Area for designated receptors. Cultural Heritage ES Chapter 6 is supported by the following appendices: Appendix 6.1: Historic Environment Desked-Based Assessment ('HEDBA') [REF: 6.3]; Appendix 6.2: Archaeological Geophysical Survey Report [REF: 6.3]; Appendix 6.3: Archaeological Mitigation Strategy ('AMS') [REF: 6.3]; Appendix 6.4: Stakeholder Engagement [REF: 6.3].Figure 6.1: Designated Heritage Receptors within 3km of the Order Limits [REF: 6.2]; Figure 6.2: Non-Designated Heritage Receptors within 1km of the Order Limits [REF: 6.2]; Figure 6.3: Zone of Theoretical Visibility [REF: 6.2]

10.8 Allerdale Local Plan Part 1 Policy S27 Heritage Assets is relevant. This policy sets out that the historic environment including all heritage assets and their settings will be conserved and enhanced in a manner appropriate to their intrinsic historic value and significance, their importance to local character, distinctiveness and sense of place, and to other social, cultural economic or environmental benefits/ values. The Council will work with partners to seek the conservation and enhancement of all designated or non-designated heritage assets within the Plan Area. The proposal is considered to accord with Policy S27 ALP1.

10.9 It was agreed with Council's Archaeological Advisor that 'the area of mining can be discounted from any further archaeological work' (refer to Table 6.5 Planning Inspectorate comments). It is noted that there is also evidence of areas of previous

mining across the southern part of Area C, which could have impacted any surviving pre-industrial heritage receptors (of archaeological interest).

10.10 The Proposed Development has the potential to have significant effects on the identified designated heritage receptors. The Cumberland Archaeologist seeks to safeguard heritage assets in terms of below ground work through the following……

- Implementation of the AMS
- Mitigation requirements identified through investigation could be implemented through the detailed design or through additional measures required by the Councils Archaeologist such as a Watching Brief for certain types of works and/or in certain parts of the site.
- The inclusion of archaeological strip, map, and sample as mitigation options as it provides an appropriate scope of mitigation depending on the nature of the archaeological resource and impact from the scheme.

10.11 Due to the landscape character of the Study Area, combined with topography, intervening vegetation, existing landscape features, and in some instances the distance from the Site, the majority of the designated heritage receptors are unlikely to experience any change to their value as a result of the Proposed Development, and have therefore been scoped out of the ES Chapter (for completeness these have been referenced and considered in the HEDBA (Appendix 6.1) and this is accepted. The setting of heritage assets is also considered in the Landscape section.

10.12 It is noted as shown on the Landscape Strategy Plan (Figure 7.6.1-7.6.5), there are opportunities for new native structural landscape planting to provide visual screening, including native hedgerows, hedgerow trees, scrub / shrub planting, with the aim of breaking up views of the extent of development, and linking existing habitats / landscape features where possible to provide enhanced green infrastructure and biodiversity opportunities; and Additional scrub and woodland planting on the steeper, southern section of Thief's Gill Quarry in line with green infrastructure policies within the Allerdale Borough Council Local Plan 1 (Policy S24).

10.13 Cumberland Archaeologist noted that the submitted Environmental Statement (ES) concludes that the construction and operation of the proposed solar farm will have a significant moderate adverse effect on the setting of the designated heritage assets of the Large Irregular Stone Circle and Round Cairn at Dean Moor scheduled monument and Wythemoor Sough listed building. It is suggested that the Historic England provide further comment on designated heritage assets in terms of the effects on the construction, operational and decommissioning phases.

10.14 It is noted that in terms of the embedded Mitigation (Operational phase) there is the retention of existing Site boundary vegetation (where practicable), particularly established/mature woodland habitats, as outlined in the Landscape Strategy Plan (Figure 7.6.1-7.6.5) and Appendix 7.7: Outline Landscape and Ecological Management Plan ('OLEMP')[REF: 6.3]; There will be the use of existing field entrances during delivery / construction of the Proposed Development to minimise impact on field boundaries; There is a 'Green Infrastructure area' within the south of Area C as shown on Work No. 6 (Green Infrastructure) [REF: 2.3] and Figure

3.4(Parameter Plan) around the SM (Stone Circle and Cairn); There is the siting of infrastructure to minimise visual intrusion, including areas of no development of solar infrastructure on the elevated open moorland within Area C; There will be reinforcement of existing field boundaries where required. In terms of impacts on the English Lake District WHS, this is set out in the Cumberland Commissioned LVIA report.

10.15 In terms of the proposal's impact on non-designated archaeological assets, the application site has been the subject of an archaeological desk-based assessment, an archaeological geophysical survey and a walkover survey and these have identified a number of archaeological assets and areas where potential archaeological assets may be present on the site. These include late-19th century mining remains and geophysical anomalies detected by the survey as being of potential interest. It is accepted that these assets are likely to be of low/moderate significance and that the construction of the proposed development would disturb them causing, in a worst-case scenario, a major adverse effect.

10.16 The Archaeological Mitigation Strategy (AMS) in appendix 6.3 of the ES provides an adequate framework for the mitigation. It states that the mitigation should comprise a staged approach starting with an archaeological trial trenching evaluation. In the unlikely event that archaeological remains of highest significance are identified in the evaluation, they would need to be protected from harm during the construction and decommissioning of the scheme. Adequate methodology for achieving this protection would need to be agreed in writing prior to the commencement of the construction of the scheme.

10.17 Any archaeological remains of lower significance revealed in the evaluation would need to be subject to a programme of archaeological investigation and recording in line with the procedures outlined in the AMS. A written scheme of investigation for this programme of archaeological work would need to be submitted, and agreed upon, prior to the commencement of the construction of the scheme.

10.18 The scope of any intrusive evaluation will be determined following more detailed pre-commencement design work. Once a potential final design is established this will be assessed against the nature and extent of potential archaeological material within the Site to provide sufficient detail to inform the scope and extent of the second stage of any further fieldwork. The details of any further mitigation will be set out in supplementary AMS, if required.

10.19 The requirement for any final mitigation will be dependent on the results of any further fieldwork required following the procedure set out in the AMS (Appendix 6.3) and to be secured by a DCO Requirement. Construction and design alternatives could also be used to mitigate potential impacts to archaeological receptors (i.e., ballasted arrays, on-ground cable trays, and no-dig access track or fencing)

10.20 It is noted that, several methodologies may be required: Evaluation fieldwork (intrusive site investigations to determine nature and extent of the identified archaeological potential), this will comprise a set of archaeological trial trenches targeted on areas of archaeological potential highlighted in the HER and Geophysical Survey Report (Appendix 6.2); Archaeological monitoring and recording

and/or excavation (preservation by record) during construction; Construction management practices; and Public dissemination of archaeological and historical data; All archaeological fieldwork should be monitored by the Council's Archaeological Advisor to ensure that the works comply with the agreed scope and methodology detailed in an appropriate WSI. The Council's Archaeological Advisor will also review all reporting on the archaeological Fieldwork

10.21 Potential effects of other relevant development proposals within the 3km Study Area which may give rise to potential cumulative effects with the Proposed Development. The full list of cumulative developments that are considered as part of the ES within Chapter 2 – EIA Methodology.

10.22 There are two cumulative developments within 3km of the Site with potential for cumulative effects relevant to this Chapter due to their size and distance from receptors.

10.23 Land at Lillyhall North, Branthwaite Road, Winscales, Workington (Ref. FUL/2021/0009) ('Land at Lillyhall North'). The development was approved with conditions in February 2021.

10.24 The potential Lostrigg Solar scheme, which, at its closest point, is 15m north of the Site is a large-scale solar farm which was first publicised when a scoping request was made to the Secretary of State in June 2024. This has now been withdrawn, and it is anticipated that the scheme will progress as a planning application under the Town and Country Planning Act.

10.25 ES Table 6.9 provides a summary of potential cumulative effects on heritage receptors at this stage of the assessment process. Taken together, there is a significant cumulative effect to Wythemoor Sough and adjoining barn and stable (a moderate adverse effect). No other significant cumulative effects have been identified.

10.26 An assessment of the likely cultural heritage effects arising from the Proposed Development has been undertaken. Initial desktop study has been followed by Site and Study Area visits to gain an understanding of the baseline conditions of the Site and its surrounding landscape. Table 6.8 contains a summary of the preliminary assessment of the likely significant effects of the Proposed Development. Table 6.9 provides a summary of potential cumulative effects on heritage receptors at this stage of the assessment process Overall significant cultural heritage effects are broadly limited to the Site itself, and receptors in close proximity of the Site. It is accepted that as time passes and the mitigation becomes established, the significance of these effects will reduce, with potentially beneficial effects predicted for vegetation within the Site.

10.27 The Council's Relevant Representation attached details of the programme of archaeological work undertaken to compile the archaeological baseline and the ongoing discussions to secure appropriate mitigation for the impact of the scheme. This is not repeated here.

10.28 A Draft Archaeological Mitigation Strategy was submitted which The Cumberland Archaeologist was in broad agreement with. Areas have been identified

as containing archaeological remains susceptible to harm from the scheme and a range of mitigation measures have been proposed.

10.29 In relation to archaeology, whilst there is the potential for below ground remains to be encountered, the scope and extent of the remains, as a result of the field evaluation works undertaken to date, do not suggest these to be of national significance warranting preservation in situ. The proposed works within the Solar PV Site comprise the installation of the Solar PV Panels, cutting of trenches for cabling, ground levelling for installation of Solar PV Panels, as well as the installation of access roads and other supporting infrastructure for the Solar PV Panels. The proposed works have the potential to result in physical impacts to these assets if encountered.

10.30 Further archaeological mitigation fieldwork in order to preserve any encountered remains 'by record' or through design measures (such as the use of pre-cast concrete blocks rather than piled mounts within the Solar PV Site) to enable preservation in-situ of archaeological remains or micro-siting of Scheme elements is to be safeguarded through the requirement for a Final Archaeological Mitigation Strategy to be developed substantially in accordance with the Framework Archaeological Mitigation Strategy, as set out above.

10.31 With these considerations in mind, it is concluded that the requirements of Policy S27 are suitably met and accordingly, the Council views the impacts of the proposed development as having a neutral impact.

11. Landscape and Visual Impacts

11.1 Landscape is a key asset to the locality and the Cumberland Council area forms part of the Lake District National Park.

11.2 Allerdale Local Plan Part 1 relevant policies are:

- Policy S24 Green Infrastructure
- Policy S32 Safeguarding Amenity
- Policy S33 Landscape - S33 states that policies will be assessed, with specific regards to biodiversity, in relation to 'Biodiversity features, ecological networks and semi-natural habitats' amongst other topics.
- Policy DM5 Farm Diversification
- Policy DM14 Standards of Good Design
- Policy DM17 Trees, Hedgerows and Woodland

Landscape and Visual Impact Assessment (LVIA)

11.3 Cumberland Council have commissioned a Peer Review of the LVIA and Chapter 7 of the ES. The submitted LVIA identifies the landscape and visual baseline conditions and is supported by good graphical information. This includes numerous ZTV's which show the theoretical visibility of the different elements of the proposed development (i.e. Solar PV Infrastructure, Grid Connection, and POC Mast Siting Area) which helps to identify the likely visual receptors. It would be useful to see

multiple ZTVs showing the visibility of the different Areas (Area A, B & C) which were identified. This would be particularly useful due to the size and topography of the site and the surrounding landforms. These ZTVs would quickly show which Areas of the site are visible from the surrounding landscape.

Zone of Theoretical Visibility (ZTV)

11.4 Figures 7.4a-b provide an overall ZTV with descriptions of the heights of components of the Proposed Development. Figures 7.5 a-c provide a breakdown of the ZTV showing the theoretical viewsheds of individual components of the Proposed Development. While the inclusion of the auxiliary infrastructure mentioned is not specifically stated, it is accepted that the ZTVs provided are representative of the worst-case scenario of theoretical visibility.

National Character Area (NCA 7 West Cumbria)

11.5 These were scoped out and were not assessed in the LVIA.

Public Rights of Way (PROW)

11.6 Recreational routes / Public Rights of Way (PRoWs) (Landscape Effects) - Viewpoint locations located on PRoW within the study area confirm that recreational routes have been considered within the submitted LVIA (see viewpoints 1, 8, 10, 11, 12, 13 & 14). Recreational routes are typically assessed within the visual assessment.

Open Access Land (Landscape Effects)

11.7 CRoW access land appears to be considered with the inclusion of viewpoints 13 and 14 which are from within CRoW access land within the Lake District National Park Open Access Land is typically assessed within the visual assessment.

Other views and visual amenity beyond the 2.5km study area

11.8 - Four viewpoints (Viewpoints 11-14) are located outside of 2.5km of the Proposed Development. The Lake District National Park (LDNP) and the World Heritage Site (WHS) have been included in the assessment and is evidenced with LDNP landscape character areas being included in the landscape assessment. These areas are outside 2.5km have also been assessed. Following site visits for this review, the study area of 2.5km is considered acceptable, and it is unlikely that there would be any significant landscape or visual effects outside of this study area. The LDNP and WHS are correctly included within the assessment.

Heritage Assets (Landscape Setting)

11.9 The setting of heritage assets is assessed within Chapter 6 Cultural Heritage.

Lighting

11.10 Effects due to lighting were not included in the submitted LVIA. The proposed lighting is described in ES Chapter 3 -Site and Proposed Development Description.NB: ‘The Council agreed to the effects of lighting being scoped out of the ES in their Scoping consultation response to the LVIA.’ (Table 7.1). Lighting however is considered in the Biodiversity topic with the need to consider lighting design and measures taken to avoid or minimise lighting impacts on ecological receptors. This should also include consideration of effects relating to intermittent lighting sources such as motion activated security lighting

Landscape Mitigation and Enhancement

11.11 Mitigation proposals are included in the Landscape Strategy Plan shown in Figures 7.6.1–5. The Landscape and Visual assessments provide assessment at various phases of development including construction, operation (year 1), operation (after 15 years) and decommissioning. This therefore assesses the Proposed Development first without mitigation measures (year 1) and with mitigation measures (year 15). Information about the height of mitigation planting included in the visualisations at Year 15 is not obvious within the report. There does not appear to be an explanation. The mitigation measures proposed seek to strengthen the existing landscape features where possible. This includes the infilling and enhancement of existing, enhancing existing woodland and scrub areas as well new woodland planting (along road edges (in the north) and watercourses in the southern area. There is also some hedgerow tree planting along Branthwaite Edge Road on the eastern boundary. These measures would, over time, help to reduce the visibility of the Proposed Development by screening views from the roads which run adjacent to the Site. Further planting of extra woodland and/or hedgerow trees would be suitable along the west of Branthwaite Edge Road. Where the avoidance of a likely significant effect is reliant on mitigation measures, these should be described within the ES along with the proposed methods by which they will be secured through the DCO, assisted by a plan or figures where appropriate. Embedded mitigation, landscaping and planting

LVIA Assumptions and significance

11.12 Heights and dimensions of components of the Proposed Development are set out in ES Chapter 3 Site and Proposed Development Description (Table 3.2). The heights correspond to the heights stated on relevant ZTV plans (Figures 7.4a-b & 7.5a-c) LVIA assessment of Significance

11.13 A thorough methodology is provided in Appendix 7.1 - Landscape and Visual Methodology. Para 3.9.2 within that appendix determines what effects are assessed as ‘significant’. There are generally good descriptions where judgements have been

made, particularly in Appendices 7.2 and 7.3, the schedules of landscape and visual effects respectively.

Visual Receptors

11.14 There is evidence within Table 2.1 of Appendix 7.1 that viewpoints were added following consultation with the relevant consultation bodies. The judgement of the sensitivity of receptors appears to follow relevant guidance.

Photomontages

11.15 Para 2.5.14 and 2.5.15 within Appendix 7.1 outline the viewpoints chosen to be taken to photomontage stage and explains that they will be produced as per the guidelines - Landscape Institute TGN 06/19 Type 3. It appears that these were agreed following consultation. The visualisations provided in Appendix 7.6 – Visualisations appear to be produced in line with best practice guidelines and contain the components described in the scoping response.

Sequential Views

11.16 Views from local roads and footpaths are, in some cases, covered by representative viewpoints, however, the sequential views do not seem to be assessed. For example, VL2b is representative of views from the unclassified road east of Gilgarran, but it is not representative of the worst-case scenario views from this route which would be further east when driving through the Site. Similarly, VL3c on Dean Cross Road does not consider the worst-case views which are to the east of the viewpoint. VL6a and VL7 give a good representation of views from Branthwaite Edge Road which runs along the eastern edge of the Site.

Review of Submitted LVIA Summary

11.17 This review has been undertaken following the Guidelines for Landscape and Visual Impact Assessment (GLVIA), 3rd Edition (2013) and the Landscape Institute in their Technical Guidance Note 1/20 issued in January 2020 - Reviewing Landscape and Visual Impact Assessments (LVIAs) and Landscape and Visual Appraisals (LVAs).The scope of the assessment meets the requirements set out in the Scoping Opinion.

11.18 The Preliminary Environmental Information Report (PEIR) submission has thoroughly examined the consultation responses and have been provided, except: landscape assessment of several LDNP landscape character areas where potential landscape effects may be experienced; Information about the height of mitigation planting included in the visualisations at Year 15. A summary of the findings of the review of the assessment methodology identified these were carried out according to guidance.

11.19 A summary of findings of the review of the assessment of effects shows that judgements of effects are correct. Some of the assessment is not clear and transparent as the assessment is generally descriptive in its judgements, some processes and references are lost within the scale of submitted documents.

11.20 The chosen locations for VPs 2b and 3c are not worst case scenario which is not best practice. Photography for VP 14 is unclear. Additional information that would be useful include: Multiple ZTVs showing the visibility of the different Areas (Area A, B & C); View from top of Dean Cross Road; High quality and clear photography (particularly from the LDNP); Sequential views from Branthwaite Road and Dean Cross Road; Inter relationship with Cultural Heritage; Some data for VP unclear – dates (summer or winter), grid references and quality.

11.21More mitigation measures are recommended with more hedgerow tree / woodland along Branthwaite Edge Road. There is not clear inter relations

11.22 There is not clear inter relationship between chapters of different topics. For example Cultural Heritage contains landscape related assessments for the settings of historic assets.

Independent Landscape and Visual Summary

11.23 The comparison of the independent LVIA and the submitted LVIA are mostly similarly. The GLA independent assessment judgements for landscape align closely to the submitted LVIA judgements.

11.24 For visual, there are some minor differences between the judgements in the GLA independent assessment and the submitted LVIA, however, the level of significance would remain the same for all viewpoints except VL14.

11.25 The cumulative effects would be Moderate adverse (significant) with Lost Rigg and the independent LVIA concurs with the submitted LVIA.

12. Ecology and Biodiversity

12.1 The following ALP1 policies are considered relevant: Policy SA24 Green Infrastructure; Policy S35 Protecting and Enhancing Biodiversity and Geodiversity; Policy S36 Air, Water and Soil Quality and Policy DM17 Trees, Hedgerows and Woodland.

12.2 Biodiversity is assessed in Chapter 8 of the ES. This chapter is supported by the following figures:

- Figure 8.1: Statutory Designated Sites;
- Figure 8.2: Non-statutory Designated Sites and Notable Habitats.
- Appendix 8.1: Preliminary Ecological Appraisal (‘PEA’) and Great Crested Newt (‘GCN’) Report;
- Appendix 8.2: National Vegetation Classification (‘NVC’) Survey Report;
- Appendix 8.3: Bat Survey Report;
- Appendix 8.4: Otter and Water Vole Survey Report;

- Appendix 8.5: Breeding Bird Survey Report;
- Appendix 8.6: Wintering Bird Survey and Hen Harrier Survey Report;
- Appendix 8.7: Shadow Habitats Regulations Assessment ('sHRA')
- Appendix 8.8: Biodiversity Net Gain ('BNG') Report;
- Appendix 8.9: Stakeholder Engagement.

Other related documents are set out in: -

- Environmental statement: Appendix 5.1 – Outline Construction Environmental Management Plan
- Environmental statement: Appendix 7.7 – Outline Landscape and Ecology Management Plan

12.3 From the Scoping Opinion certain matters relating to Ecology were Scoped out: Impacts of Operational Traffic and Access – noise, vibration and visual disturbance; Potential Effects on Designated sites and Notable habitats due to a reduction in air quality from increased traffic exhaust emissions; Habitat Loss, Disturbance and Fragmentation - modified sheep grazed grassland;

12.4 From the Scoping opinion additional matters relating to Ecology and Biodiversity were scoped in: Lighting to avoid disruption of ecological corridors such as hedgerows that provide flight-lines for bats; Bats with regard to foraging and commuting; Dormice; Ancient Woodland during Construction and Decommissioning; Veteran and Ancient trees; Important ecological features; Dean Moor County Wildlife Site (CWS); Absent species from surveys; Ponds and hedgerows; Invasive Non-native Species (INNS).

12.5 The Assessment Methodology is set out in ES Paragraph 8.3.2.

12.6 The Council has commissioned an independent review and assessment of the submitted documentation by a qualified Ecologist. They have raised comments relating to the shadow HRA, BNG and Protected Species.

12.7 shadow Habitat Regulations Assessment (sHRA)

Comments relating to the Assessment of Likely Significant Effects (LSE) (Table 3.3) are provided below:

Zone of Influence – 10km was established in the sHRA and ES, however the Planning Inspectorate Scoping Opinion1 14th September 2023 states that the "*the ES should consider potential effects to occur beyond 10 km, particularly where designated sites are designated for mobile species such as birds and bats. Effort should be made to agree the study area(s) with relevant consultation bodies.*" With due consideration of functionally linked land for herring gull, the sHRA should include Morecambe Bay and Duddon Estuary SPA (which are beyond 10km) within the ALSE stage of the HRA the ZoI should also incorporate designated sites that are indirectly connected downstream of the site.

Potential treats and pressures – INNS (Invasive Non-Native Species) – Table 3.3 of the sHRA states that the application site is 'far' from Lake District High Fells

SAC and North Pennine Dales Meadows SAC and screens out LSE on this basis. Further detail is required, including actual distances and any potential hydrological connections between the application site and these Habitats Sites to accurately screen out this LSE**.**

Pollution – It is not clear in the text whether LSE is anticipated or not, it is presumed River Derwent and Bassenthwaite Lake SAC has been scoped in, however this is not explicit. No clear conclusion is drawn in relation to the River Ehen SAC and justification for scoping out Lake District High Fells SAC and North Pennine Dales Meadows SAC is required.

Human induced changes in hydraulic conditions – The statement on likely changes to SACs is not clear, clarification is required regarding why there will be no direct change and which Habitat Sites this assessment applies to. This does not address indirect changes.

Siltation – LSE is identified in relation to River Derwent and Bassenthwaite Lake SAC but River Ehen SAC is scoped out, however further detail is required to explain why LSE is not anticipated at other Habitats Sites.

Changes in species distribution – Further detail is required on how the construction phase of the project could affect distribution of qualifying features (fish species and otter are named) of the River Derwent and Bassenthwaite Lake SAC, with detail on their presence and distribution on site. If pollution is the driver for this impact pathway, qualifying features that are not recorded on site must also be considered. The effects of pollution may be determined downstream of the site and this must be given consideration. In addition, further detail is required to explain why LSE is not anticipated at other Habitat Sites, particularly North Pennine Dales Meadows SAC where this threat is identified in the SIP.

Water pollution – Water pollution is listed as a threat for the River Derwent & Bassenthwaite Lake SAC within the Site Improvement Plan, however only Pollution to groundwater is included in Table 3.2 and not Pollution to surface waters. In Table 3.3 Pollution to surface waters must be considered in relation to this Habitat Site.

Marine water pollution – the sHRA states “The Proposed Development will not lead to any marine pollution which could impact the Solway Firth SPA”. The Solway Firth is connected to the project site via the River Derwent catchment and therefore the potential for LSE as a result of this pathway must be fully assessed.

Problematic native species – This is assessed in relation to Lake District High Fells SAC only, however this impact pathway is not listed within the SIP and it is not clear what the impacts (or lack thereof) would be as a result of this project. Clarity is required.

Modification of cultivation practices, Mowing / cutting of grassland, Fertilisation – All three of these pathways are assessed in terms of North Pennine Dales Meadows SAC only, clarity on why these pathways do not apply to the project is required.

Screening assessment overview – this should be reviewed and amended in light of the above comments.

Screening Matrix – Table 4.2 screening matrix lacks clarity; there is no pathway shown for the first rows of this table and it is not clear how the differences between construction and operational phase have been assessed. In addition, the matrix assesses the project in-combination but further detail is required on what projects or plans have been scoped in. Further clarification is required regarding ALSE of the project alone and in-combination with other plans and projects.

Data Inconsistencies – Table 4.4. highlights that common gull were recorded at over 1% of the SPA population but Section 4.3.9 states that results show this species as present at under 1% of the SPA population. Similarly, herring gull were recorded at 0.4% of the SPA population as shown in Table 4.4 however Section 4.3.16 implies they were recorded at over 1% of the population. Section 5.3 goes on to state that herring gull were recorded at 7.3% of the SPA population. Accurate data regarding species recorded during wintering bird surveys must be utilised within this assessment in order to draw conclusions on LSE and effects upon integrity of the Solway Firth SPA.

Errors – There is a typo in Section 5.3.1, herring are not considered in this Appropriate Assessment. Section 5.3.2 states that herring gull were recorded on only two of the seven visits with peak flock counts exceeding 1% yet Table 5.2 indicates counts of herring gull exceed 1% on three different months. Bird survey data must be accurate when considering in-combination impacts upon Solway Firth SPA.

Functionally linked habitat – Section 4 refers to consultation with Natural England (NE) that highlights functionally linked habitat for qualifying features (herring gull) directly adjacent the site. NE link this population of herring gull to Morecambe Bay and Duddon Estuary SPA, however this Habitat Site is not included in the ALSE. It is assumed that this is because Morecambe Bay and Duddon Estuary SPA is located over 10km from the site and outside the ZoI, however clarification is required as it is considered that this SPA should be included in the ALSE. Appendix C concludes that the herring gull recorded within the site are likely to form part of the population for Morecambe Bay and Duddon Estuary SPA and not Solway Firth SPA, however evidence is required to demonstrate this.

Changes in Species Distribution – **Section 5.2.12 – 5.2.26** is unclear, the assessment appears to imply that there is no effect on integrity of the River Derwent and Bassenthwaite Lake SAC but goes on to mitigate against effects of the project. This section requires refinement to provide a clear and concise assessment of the project's effects upon the integrity of the SAC.

Section 5 – the assessment refers to availability of suitable foraging habitat in terms of the project itself and the Lostrigg solar development which is considered in combination with this project and uses this as justification that loss of foraging habitat would not adversely affect the herring gull populations using the site and Lostrigg solar farm site. No evidence regarding surrounding usage by herring gulls is provided within the HRA to confirm this. Certainty is required in order to rule out impacts on the integrity of the Solway Firth SPA, such certainty is currently lacking in this assessment, to address this greater detail regarding herring gull presence at Lostrigg is required.

Conclusions drawn in **Appendix C** regarding the use of the site by herring gull are contradictory, the assessment notes that: "*NE also stated that as herring gull were favouring the fields as a loafing area, rather than feeding, such that the actual ecological dependence on the fields within the Proposed Development is likely to be low*." However, the following Section indicates that fields on site were in use by herring gulls due to abundances in resources as a result of agricultural practices (slurry spraying) but also after periods of high rainfall. Given the location of the site and high likelihood of periods of high rainfall, further justification that the site is only of value for loafing and not foraging is therefore required to support the conclusion that no effect on the integrity of Solway Firth SPA is anticipated.

Wintering Bird Data – The sHRA highlights that wintering bird surveys have been completed to inform the assessment. Wintering bird surveys were undertaken during September 2023 – March 2024 and supplemented with data gathered from the nearby proposed solar development at Lostrigg (completed during September - December 2024). Survey data is considered to be valid and compliant with CIEEM guidance (Advice note on the lifespan of ecological reports & surveys, CIEEM 2019) at the time of writing this response. **However, the applicant should consider validity of data prior to submitting this application to the secretary of state and ensure that the sHRA assessment reflects the most up to date data set regarding wintering birds.**

Section 8.5.10 does not assess the significance of effects on all internationally designated sites, this is required for all sites scoped into this assessment.

Section 8.5.30 & 8.5.32 states there would be a short term temporary negative effect as a result of construction works. However, the significance level assigned is not consistent with the conservation value as per CIEEM guidelines. Using the precautionary principal a significant effect upon an ecological receptor of local value would result in a significant effect at the local level, or not significant at the local level. Not, as stated within the assessment, the site level.

12.8 Biodiversity Net Gain (BNG)

Comments relating to the BNG assessment are provided below:

Habitat Assessment - Section 8.3.13 of the EcIA states that trees and habitats were assessed using superseded guidance, clear justification for use of older guidance is required. No dates for surveys are given within this chapter, up to date survey data must be presented within this assessment.

Qualifications - Section 1.6.2 states 'all survey work and reporting was undertaken by experienced qualified ecologists in accordance with the code of professional conduct of the Chartered Institute of Ecology and Environmental management (CIEEM)'. Further information on surveyor's experience or qualifications is required to support this statement.

Appendix B - No quadrat or woodland plot data has been supplied to support the BNG condition assessments.

Mapping - An area in the south of the site (around Thief's Gill) is mapped on Figure 3.2 (Pre-development habitats, hedgerows and watercourses recorded on Site in Area C) as Other lowland acid grassland. This same area is also mapped as lowland acid grassland within the PEA and is described in Section 4.2.2. This area was surveyed in the NVC as Area 2 and was allocated a habitat type of M23b. M23b can correspond to one of three different UK Hab habitats including f2a lowland fens, f2b Purple-moor-grass and rush pastures and g3c8 Holcus – Juncus neutral grassland. However, none of these corresponding habitats is lowland acid grassland. Therefore, there is a discrepancy in the habitat data presented in the BNG report and the NVC report (see NVC report comments for further info).

BNG metric - The front cover of the Metric is missing information and requires completion. The metric favours retention and enhancement of habitats. Justification is required for the ecological benefits of felling an area of existing mixed woodland to replace with mixed scrub and acid grassland (Section 4.1.13).

Lowland fen has been recorded surrounding Pond 1. This area is described in Section 4.2.22 of the PEA report as '*swamp dominated by floating bulrush*'. Lowland fen is a priority habitat and is described as 'peatlands which received water and nutrients from the soil, rock and ground water as well as rainfall' in the JNCC UK Biodiversity Action Plan Priority Habitat Description – Lowland Fens (2008). Lowland fen is considered to be an **irreplaceable habitat** under the Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024. Based on the information provided it's considered that the vegetation described is f2d Aquatic marginal vegetation. There is not a corresponding marginal vegetation habitat type within the Biodiversity Metric, however it is suggested that either an alternative wetland habitat type is used with suitable explanation, or that further evidence is provided to support that this area is lowland fen priority habitat.

Hedgerows - The baseline hedgerows are not labelled in the metric or listed **in Table 3.1** and so cannot be cross-referenced with the condition assessment sheets in Appendix B. One hedge of 36 was assessed as 'poor' but three hedges are included in the metric as 'poor'.

Individual Trees - Section 4.1.2 explains why post-development tree planting has not been included in the metric or post-development plans at this stage. However, there is no explanation as to why individual trees shown on the baseline plans are not included within the metric calculation.

Dean Moor CWS - In Section 2.8 the southern part of the site falls within the Dean Moor County Wildlife Site (CWS). This designation has not been considered when classifying the strategic significance of the site. Any areas that fall within the boundary of Dean Moor CWS should have a strategic significance of 'formally identified in local strategy'. Areas that are adjacent of connected to the CWS should have a strategic significance of 'location ecologically desirable but not in local strategy'.

Outline Landscape and Ecology Management Plan (OLEMP) - The recommendation for a Landscape and Ecological Management Plan (LEMP) is

welcome and this is recommended as a pre-commencement condition, requiring approval by the Local Planning Authority before works commence.

The LEMP must include provisions for monitoring and review of the document at the end of each 5-year period, for the 40-year lifespan of the project.

It is recommended that soil-testing is conducted to provide confidence that the creation of lowland acid grassland in the southern part of the site is achievable. Any seed mixes recommended for establishing grasslands under the solar arrays, must contain suitably shade tolerant species. A detailed plan to enhance and/or expand the wet acid moorland habitat on site is required in order to permit the construction of this development within Dean Moor CWS. Recommendations for habitat management within the Dean Moor CWS must be compatible with any existing habitat management plans and aims for the site. The outline grazing management plan must contain outline / example stock levels for all grazed areas.

12.9 National Vegetation Classification (NVC)

The National Vegetation Classification (NVC) communities of the surveyed areas, with M23 *Juncus effusus/ acutiflorus – gallium palustre* rush pasture a common component of hillside flushes and the improved grassland a transitional habitat comprising MG6 and MG10 appear to be a sound assessment. However, the following comments need to be addressed to complete the assessment:

Mapping - The associated figures are provided in Phase 1, with the NVC areas depicted with a blue hashed boundary. The underlying habitats do not correspond with the description of areas in Section 3 and appear to have been mis-labelled. This is most pertinent to Area 3, which is described as herb deficient rye-dominated sward, but on the Figure 1 appears to be a large component of marshy grassland. Likewise, Area 1 is depicted as a large expanse of improved / modified grassland but is described in the report as a ‘rush dominated marshy grassland’. For Area 2 the quadrat placement has 2 quadrats beyond the boundary of the survey area. As it is noted in the methodology that homogenous stands were assessed, we would urge the applicant to consider whether the habitat boundary needs to be expanded. Noting however that this would increase the area of M23 identified and would have implications for the subsequent BNG assessment.

Survey Areas - It is not clear why Areas 1 – 3 were selected. There appears to be areas of lowland fen, acid grassland and species-rich neutral grassland that have not been subject to NVC survey. Can an explanation be included in Section 2.1 as to why and how survey areas 1, 2 and 3 were selected, and as such why were notable habitats such as lowland fen, acid grassland and species-rich neutral grassland were omitted from the assessment.

NVC implications on BNG - The results of the NVC report do not seem to have been considered in subsequent reports, particularly the BNG report. Both M23 communities (M23a and M23b) are stated to meet the definition of Purple Moor Grass and Rush Pasture (PMRP) a Habitat of Principal Importance listed under Section 41 of the NERC Act (2007). However, PMRP habitat is missing from the

subsequent report figures and BNG calculations. The BNG report and metric must be updated to reflect the findings of the NVC survey.

Recommendations - The report makes no reference to the ecological significance of the identified habitats and botanical species, particularly in relation to the *Vascular Plant Red List for England.* The importance of PMRP, in relation to the NERC Act (2007) is provided in section 8.4.21 of Chapter 8 of the ES. There is no mention, however, to the areas of lowland dry acid grassland, swamp and flush communities. The subsequent OCEMP and OLEMP make minor reference to PMRP in relation to Dean Moor Country Wildlife Site. Greater clarity is required as to how lowland dry acid grassland, swamp and PMRP will be impacted by the development in Chapter 8 of the ES, and then how their avoidance / mitigation / compensation will be managed in the OCEMP and OLEMP.

12.10 Protected and notable species

Bats

The site was assessed for bat roosting, foraging and commuting in April 2023. This included external inspection of three buildings to be retained and ground level assessment of the trees within the site. The buildings were assessed as offering negligible suitability for roosting bats. Trees with potential roost features were noted along the road and to be likely present within the woodland beyond the western boundary.

- Further detail is required on the methodology of the bat roost and activity surveys:
- Confirmation the surveyor holds a Natural England bat survey licence;
- Clarification of whether all trees could be fully visualised from the ground given in April they would be expected to be coming into leaf;
- Clarification of equipment used;
- Weather conditions during the period of static detector data analysed to demonstrate weather conditions were suitable for assessment of bat activity levels; and
- Orientation of the microphone on the static detectors placed, especially those at low height, to demonstrate that these would adequately detect passing bats.

Bat Roost Suitability - The PEA report recommends further survey where trees with bat roost suitability will be impacted. No further roost presence/ likely absence surveys appear to have been carried out, but it is not specified whether this is due to no direct or indirect impacts being anticipated. If trees are being retained, appropriate buffers should be specified to prevent indirect disturbance to any roosting bats potentially present.

With regards to the bat activity assessment, the habitat was assessed as offering low to moderate potential for use for foraging and commuting bats. Activity surveys were

then undertaken over four periods between May and September 2023 (except June) using static bat detectors. Further justification or detail is required in the following areas:

Habitat Value - The site was assessed as offering low to moderate suitability for use for foraging and commuting bats, which deviates from the accepted categories under the Bat Survey Guidelines in use at the time (Collins, 2016) (i.e. low or moderate). The survey effort infers that the suitability was downgraded to low. Clarification is required on the classification of habitat value particularly as the presence of grazed grassland, hedgerows, watercourses and woodland would be indicative of moderate suitability as a minimum and may even be high suitability.

Survey Effort - The subsequent bat activity survey effort did not follow the recommended survey effort specified in the Bat Survey Guidelines in place at the time (Collins, 2016) and justification is required for non-standard approach taken. The bat survey report indicates survey effort was designed on the basis of an assumed low suitability rating and no further bat activity survey is recommended, however as noted above the habitats present would indicate a high level of suitability.

Static Monitoring – Six detectors were placed out over four periods between May, July, August and September 2023. April, June and October months were not subject to monitoring and further detail is required to justify this approach.

Walked transects - were not undertaken and justification given in the ES Chapter (8.4.34) for this non-standard approach is that the site is upland, exposed and has a limited number of suitable roost sites. Walked transects can provide qualitative data such direction of bat travel and abundance, to help determine if detectors are picking up a single bat flying over a detector repeated times or a number of bats all passing once, for example. They can also highlight the presence of nearby significant roosts.

Mitigation & Compensation -The Planning Inspectorate Scoping Opinion dated 14th September 2023 states that construction and operational lighting impacts on foraging and commuting bats as well as habitat loss must be assessed and measures taken to avoid disruption of ecological corridors. The OLEMP details an ecologically sensitive lighting strategy.

A recent study by the University of Bristol (Tinsley et al, 2023) claimed to show a strong negative effect of solar farm developments on foraging and commuting bats**.** Six species showed six significantly lower activity levels in the presence of solar arrays (common pipistrelle, soprano pipistrelle, Plecotus, Myotis sp., Nyctalus sp. and serotine) and five of these species were recorded present on the application site. Recommendations are required to mitigate impacts for lost foraging and commuting habitats such as buffer zones and habitat enhancements of areas surrounding the solar farm footprint. This is to comply with Section 5.4 Biodiversity and Geological Conservation of the NSP EN-1 *'Applicants should include appropriate avoidance, mitigation, compensation, and enhancement measures as an integral part of the development'.*

Birds

Wintering Birds and Hen Harrier

A review of Appendix 8.6 Wintering Bird and Hen Harrier Survey Report is below.

Passage months were included in the winter surveys; this was reasoned well as the site is close to the Solway Firth SPA (cited in part for Barnacle Geese, which would be in passage September to October). Nine surveys were undertaken which was justified in the limitations section and is considered reasonable due to the large-scale project and potential impacts.

Assessing Importance - Table 8.5 assesses conservation value of wintering birds to be of local value. As 1% of the Solway Firth population of Herring gull has been found to use the site, the value of the site for wintering birds needs to be re-visited and is considered to be of international value (using a precautionary approach). Alternatively, robust justification for the current value assigned to this receptor must be provided.

Solway Firth SPA Qualifying Features - Section 8.4.46 in relation to herring gull, black-headed gull, common gull, lapwing and teal states: "further assessment of the presence of these species is provided in Appendix 8.7." Further relevant baseline information within the ES chapter should be included.

Hen Harrier - Section 4.6.7 of the PEA states that the wind turbine survey area is within a hen harrier sensitive location. After consultation with NE and the Cumbria Bird Club (CBC) wintering hen harrier physical surveys were undertaken. The hen harrier survey methods appear to be appropriate and any limitations and deviation from methodology is well reasoned.

Validity – Table 2.2 of Appendix 8.6 shows that the last survey was completed on the 22nd March 2024. In accordance with CIEEM guidance (Advice on the lifespan of ecological reports & surveys, CIEEM 2019) this data is valid until 22nd September 2025.

Breeding Birds

Validity - Section 8.3.16 of the EcIA states that breeding bird surveys were completed in 2023, these surveys are no longer valid, the ES chapter must ensure valid survey data is provided to inform the impact assessment.

Qualifications – No surveyor details are provided in the Breeding bird report. Further information on surveyor's experience or qualifications is required to demonstrate best practice.

Survey Approach - The times and dates of the breeding bird surveys are reported in Table 1 of Appendix 8.5 Breeding Bird Survey Report. The timing of the breeding bird surveys does not comply with the guidance referenced in the report (Survey methodology | Bird Survey Guidelines). Justification is required this deviation from methodology and any associated limitations to the survey effort.

Mapping - The bird sightings were given two categories: non-breeding/possible or probable/confirmed. 'Probable' species were treated as confirmed precautionarily for the purposes of mapping, however separate maps of the 'confirmed' vs 'probable' are required in order to accurately assess. In addition, a master map of 'possible'

territories which maps all sightings is required. Where the same ‘possible’ species were recorded in similar locations on multiple surveys these could be upgraded to ‘probable’ to avoid missing any breeding species (e.g. S41 species given in Appendix A, such as yellowhammer, wood warbler, curlew etc.).

CEMP - The chapter heading reads ‘Wintering and Breeding Birds but the chapter only deals with breeding birds, the heading needs adjusting to ‘Breeding Birds’ only. For birds the CEMP needs to follow the mitigation hierarchy, with the first option within 5.4.19 being ‘avoid vegetation clearance during the breeding bird season’ and then carry on to ECoW should work need to be done within the breeding season. The rest of the paragraph is fine, although the NBC timing isn’t as strict as it states, as they can be done anytime during the day but it’s okay as written. Paragraph 5.4.20 should include details of repeat nesting bird checks should a nest be found; for example, the ECoW would need to come back after two weeks to check again to see if the nest is still active or not. It’s a bit vague as it stands. The RAMS will also need to state this.

Mitigation & Compensation -

Barn Owls - Section 4.6.12 of the PEA states that nearby barns have potential to support nesting barn owl & that grasslands in the northern part of the site have the potential to support barn owl prey species. If significant disturbance of barns is likely, then pre-commencement checks for barn owl are required as part of the CEMP or other suitable mitigation such as timing the works to avoid the barn owl breeding season (March – August inclusive).

Great crested newt (GCN)

Survey Area - Six ponds were identified within 250m of the site, however only four ponds received further surveys for GCN due to access constraints. The rationale to reduce the survey area from 500m to 250m was due to the upland nature of site and predominantly grazed habitat, however records did return GCN presence within 1.15km of the site. The highest elevation points of the site are 250m, however GCN have been known in upland areas up to 350m elevation3

3 Cumbria Biodiversity Data Centre - Great Crested Newt . Aerial imagery shows an additional six ponds within 500m with no major barriers in between the ponds and the application site. Further justification is required to reduce the survey area from 500m to 250m considering the suitability of terrestrial habitat on site.

Habitat Suitability Index - was completed in May 2023 and determined Pond 3 to have Excellent suitability for GCN, Pond 1 and 2 had Good suitability for GCN and Pond 4 had Average suitability for GCN.

Presence/ absence survey – one visit of Ponds 2, 3 and 4 was completed using egg searching, bottle trapping, and torching (April 2023) in accordance with Froglife (2001) guidance and found no evidence of GCN. Subsequent eDNA surveys returned negative results for Ponds 1-4. Environmental DNA survey is valid for 12 months. As surveys were undertaken in 2023 these surveys are no longer valid and update eDNA sampling is required.

Mitigation & Compensation – the OCEMP (5.4.16 & 5.4.18) details appropriate measures during construction relating to GCN including ECoW supervision of all works, especially works close to ponds on site and ECoW supervision of any early planting regimes which form part of the LEMP. The OLEMP details buffer planting and a reduction in grazing pressure on site to provide resources and shelter for a range of species, management of existing woodland, hedgerows, proposed broadleaf woodland and scrubland, and distribution of habitat / log piles to provide shelter for species and facilitate species dispersion.

Otter and Water Vole

There are records of otter and water vole close to site and suitable habitat for both species associated with the watercourses flowing through site. Two otter spraints (each on a different watercourse) were identified on the PEA in April 2023 and otter presence was confirmed following dedicated surveys in July and October 2023. No evidence of water voles was identified in 2023. In accordance with CIEEM guidance (Advice on the lifespan of ecological reports & surveys, CIEEM 2019) this survey data is no longer considered valid.

Further survey - Although Section 5.4.13 of the OCEMP states an ECoW will carry out pre-commencement otter and water vole surveys; valid baseline survey data is required to inform the impact assessment prior to planning application in order to address consultee comments highlighted with Table 8.3 of the EcIA.

Notes on all habitats surveyed are provided within Appendix 8.4: Otter and Vole Survey Report (Stantec, 2024), however no assessment of suitability for otter or water vole is provided. Update surveys must include detail regarding suitability for otter and water vole within each habitat type site based on appropriate guidance.

Further surveys must be undertaken in accordance with the water vole mitigation handbook (Dean et al 2016) with one early season water vole survey and one late season survey. Any deviation from guidance relating to survey timing must be fully justified.

Badger

Further Survey – Although no evidence of badger was noted on the 2023 surveys detailed within the PEA report, this data is now out of date (as also noted by the EA 26.4.24). Section 5.4.3 of the OCEMP states that an updated badger walkover will be provided no less than 6 months before the start of construction due to the high suitability for foraging, commuting and setting badger on site. It is considered that a dedicated badger survey is undertaken before determination due to the extent of adjacent woodland, which includes ancient woodland in order to inform the impact assessment.

Mitigation and Compensation –the OCEMP (5.6.2) details appropriate precautionary measures during construction relating to badgers including excavations left uncovered with a ramp; temporary fencing to deter badgers; and daily inspections by an ECoW. The OLEMP details gaps in the perimeter fencing to facilitate commuting and foraging badgers. Further mitigation and / or compensation will be determined by the badger survey.

Enhancement – Ecological measures in Section 3.11 of the OLEMP include habitat enhancement measures such as supplementary planting of hedges and riparian corridors. The use of native fruit-bearing plants will enhance the habitat for badgers in line with Policy NSP EN-1 Biodiversity and Geological Conservation.

Hedgehog

No hedgehog presence on site was noted within the PEA report; however, the site has high suitability for hedgehog due to the presence of scrub and woodland on site. This species was scoped out due to the site comprising largely of grazed habitat and lack of cover. No impacts are anticipated to scrub or woodland during construction however a method statement detailing control measures is required to protect hedgehog.

Mitigation & Enhancement – The OLEMP details gaps in the perimeter fencing to allow entry for hedgehogs during construction and operational phases and the OCEMP states ECoW will supervise works close to ponds to minimise any potential impacts on hedgehogs during construction. Section 3.11.1 details creation of habitat / log piles in suitable areas across the Site which will enhance the area for hedgehogs. pressure on Dean Moor CWS.

Table B.1 of the OLEMP details management practices to enhance the site for this species including enhancing retained habitats including grassland, hedgerows, woodland and scrub; and reducing grazing pressure on Dean Moor CWS.

Polecat

The watercourses, pond edges, hedges and woodland habitat on site have suitability for Polecat, however these will not be directly impacted and therefore no significant impact to polecat is anticipated.

Mitigation & Enhancement - The OCEMP states works close to ponds will be supervised by an ECoW and the OLEMP includes reasonable enhancement measures including habitat management and enhancement as well as the distribution of habitat / log piles to provide shelter.

Dormice

The planning inspectorate EIA scoping opinion highlights the need for assessment of dormice in the Environmental Statement. Hedgerows and woodland within and adjacent to the site are suitable for dormice, however they were scoped out of the EcIA due to the site being on the edge of this species range and the intervening habitat between site and woodland is unsuitable. As suitable dormice habitat will be retained no significant impacts are anticipated.

Mitigation & enhancement – Section 5.4.4 of the OCEMP states that SPP and RAMs are not considered necessary as more general requirements such as ECoW supervision of vegetation removal are included. The OLEMP includes reasonable enhancement measures including habitat management and enhancement of woodland, hedgerows and scrub.

Reptiles

The PEA states that only the coarser areas of grassland on site and woodland edges are suitable for common reptiles. A common lizard was recorded on site confirming presence. The suitable reptile habitat (pond edges, around turbines, marshy areas and woodland margins) is unlikely to be impacted and therefore due to the low scale of impact anticipated, a full suite of reptile surveys was not recommended.

Mitigation & enhancement – Section 5.4.4 of the OCEMP recommends that the CEMP includes a Species Protection Plan for reptiles and a detailed RAMS, which is reasonable. Section 3.11.1 of the OLEMP details creation of habitat / log piles in suitable areas across the Site which will provide shelter and hibernacula for reptiles. Table B.1 of the OLEMP details management practices to enhance the site for this species including enhancing retained habitats including grassland, hedgerows, woodland and scrub; and reducing grazing pressure on Dean Moor CWS.

Brown Hare & Red Squirrel

The habitats suitable for brown hare and red squirrel (woodland) will not be directly impacted and therefore no significant impact to either species is anticipated.

Mitigation & Enhancement – Section 5.4.4 of the OCEMP states that adequate protection can be provided for red squirrel by more general requirements including ECoW supervision of vegetation removal. When the CEMP is updated, appropriate avoidance measures must be set out in RAMS specifically for red squirrel such as pre-commencement drey checks. Reasonable enhancement measures including habitat management and enhancement as well as the distribution of habitat / log piles to provide shelter is included in the OLPEMP.

12.11 Proposed Mitigation

12.12 Measures of mitigation should also be considered by Natural England.

12.13 The relevant Policy S35 ALP1 it is noted that there is an approach to have embedded mitigation (ES Chapter 3 Site and Proposed Development). A summary of mitigation measures embedded within the Proposed Development is provided below:

- Impacts to Dean Moor CWS during construction and decommissioning will be minimised by limiting the extent of solar panels within the CWS;
- The Landscape Strategy Plan (Figures 7.6.1-7.6.5), as well as Work No. 6 – Green Infrastructure allows all sensitive habitats to be retained such as ponds, watercourses, woodland, hedgerows and small areas of scrub, swamp, and mire. Removal of woodland, trees, hedges will be avoided, other than limited clearance to enable access and for construction compounds, where required. Buffers will be included between sensitive features (e.g. hedgerows and watercourses) and the Proposed Development;
- The Proposed Development will enhance all retained habitats, including hedgerows, watercourses and ponds with additional planting and/or improved management. Additional woodland creation, standard tree planting and the creation of species rich buffer strips within the grassland areas will be undertaken. This is presented in the Landscape Strategy Plan (Figure 7.6.1-7.6.5).

- Generating station infrastructure will be sited in heavily grazed modified grassland which is not an important ecological feature.
- To avoid direct impacts, the design will incorporate appropriate buffers between infrastructure and sensitive habitats, such as watercourses, hedgerows and woodland, and areas of peat. Buffer strips of existing poor value habitat incorporated within the layout will be under-sown with a species rich grass mix;
- No permanent lighting will be installed on the Site. Where lighting is needed, for example above doors of ancillary buildings, it will be shielded, point downwards and be switch or motion activated; and
- Incorporation of gaps around perimeter fencing to facilitate dispersal of some small terrestrial species (not including deer) across the Site.

12.14 Having regard to the characteristics of the Site and the surrounding area, and accounting for the mitigation embedded it is assessed in the ES that within the Proposed Development, the construction, operation, and decommissioning of the Proposed Development has the potential to result in the following likely significant effects: Habitat loss, disturbance or fragmentation (during construction, operation, and decommissioning); Disturbance, displacement, or mortality of wildlife (during construction and decommissioning); Disturbance, damage or loss of protected species breeding sites, hibernation-sites or resting places (during construction and decommissioning); Noise and/or visual disturbance to species using the Site caused by plant and machinery during construction and decommissioning; Impacts to designated sites or habitats through generation of dust or other pollutants from plant and machinery during construction and decommissioning; and Changes to habitats through alteration of surface water drainage (during construction and decommissioning).

12.15 Embedded mitigation measures are incorporated into the design of the Proposed Development however further mitigation is required to avoid significant negative effects, ensure legal compliance, ensure best practice is delivered, and to contribute to environmental enhancements including delivery of BNG.

12.16 During the construction of the Proposed Development, mitigation measures will be put in place within the Site boundary to protect habitatsand species. A CEMP that is substantially in accordance with the OCEMP (ES Appendix 5.1) will be implemented to prevent likely significant effects to all environmental receptors on the Site, including habitats, species, and geology. The OSMP (ES Appendix 5.3) and OCEMP provide details on soil management; protection of features such as trees and hedgerows, and the establishment and protection of margins.

12.17 There will be clear demarcation of Dean Moor CWS in Work No. 1 to ensure construction traffic and Site personnel do not access sensitive habitats on the Site. Where the Proposed Development involves construction within Dean Moor CWS, then this will be overseen by the ECoW to ensure that the most sensitive habitats, including PMRP communities are not impacted by traffic, pollution, and dust. The CEMP will also contain information on the location of the other CWS in close proximity, namely Gilgarran Plantation, and Wythemoor, as well as SRV MK P3 which may lie close to an access route for construction traffic.

12.18 Habitats which are to be retained on-Site and subject to management to improve their condition as part of minimum BNG commitments (further information in the OLEMP at ES Appendix 7.7), including woodland, hedgerows, and areas of scrub will be protected from Site work through the erection of temporary protective barriers or Site perimeter fencing.

12.19 Using existing access routes and removal of internal fence lines to access areas of the Site will be used preferentially to hedgerow removal. Where hedgerow removal is needed then the minimum width will be removed; sections in poor condition (and without trees) will be selected; hedges will be cut to their base as opposed to being dug out, and roots will be protected with sandbags or bog mats or equivalent.

12.20 SuDS infrastructure will take account of the sensitive habitats, including Thief Gill and Lostrigg Beck which are known to support migratory European eel and brown trout as well as otter. Further information on drainage is available from the FRA (ES Appendix 2.4).

12.21 Prior to works commencing, pre-construction surveys for protected species will be carried out in accordance with the OCEMP (Appendix 5.1) to identify any change in Site use, including the potential for otter holts and badger setts to have been created.

12.22 The CEMP will advise on the appropriate location and structure, including vegetative screening, of gaps in the perimeter fence to promote uptake and use by protected and notable species. Construction, including any vegetation clearance requirements, will be managed to avoid impacts to protected species via species protection plans in accordance with the CEMP. This may include avoiding vegetation clearance during the bird breeding bird season which runs from March to September, inclusive. Where this cannot be achieved, the ECoW will undertake pre-works checks and/or supervise works in accordance with the CEMP.

12.23 Any lighting used on the Site during construction will be in accordance with the ecologically sensitive lighting strategy as set out in the OCEMP. This will reduce impacts on foraging and commuting bats.

12.24 Soil stripping in compound locations will be supervised by the ECoW as necessary to advise on the retention of valuable habitats such as hedgerows; to ensure that adequate protection watercourses including the appropriate placement and erection of silt fences, and that bunds are correctly sealed and not close to watercourses. Further information is available from the OSMP (ES Appendix 5.3).

12.25 Mitigation measures regarding the Dean Moor CWS will be undertaken in accordance with the CEMP so that displaced wildlife, in particular breeding and wintering birds, have alternative habitats on which to nest and forage.

12.26 During the operation of the Proposed Development, mitigation measures will be put in place to improve habitats within the Site boundary. A LEMP that is substantially in accordance with the OLEMP (Appendix 7.7) will be adopted to implement, maintain, and monitor mitigation and enhancements to reduce likely significant effects to landscape and ecological receptors.

12.27 The LEMP will also ensure the delivery of minimum BNG commitments as set out therein. The OLEMP includes measures to reduce impacts associated with operation such as: Details of barriers and fences which may be erected to protect buffer areas, for example alongside hedgerows, watercourses, ancient woodland and peat containing soil, but also that protecting valuable solar PV infrastructure. The LEMP will detail, but not limited to fencing/ barrier specifications; the inclusion of any mammal gates within the Site (not including those along the perimeter fence); and a programme of maintenance.

12.28 The implementation of a GMP (as part of the LEMP) will set out how, for example, how stock will be controlled, what measures will be implemented to prevent overgrazing or poaching of watercourses, and measures to be taken should overgrazing or poaching of watercourses be identified. The GMP will benefit the Site through relaxation of grazing, facilitating the re-establishment of semi-natural habitats including those formerly present on the Dean Moor CWS, and associated benefits to flora, fauna, and water quality.

12.29 Details of planting and seed mixes to enhance hedgerow boundaries and riparian corridors. These will be representative of the local landscape. It will set out ground preparation requirements, including habitat creation, management, and monitoring for the duration of the operational phase. Details on how watercourses and ponds will be enhanced to promote and maintain fringe and open water habitats which will benefit riparian plant species, invertebrates, birds and aquatic species, including European eel and brown trout.

12.30 The appointment of suitably qualified ecologists to undertake tasks including monitoring visits report on success or otherwise of planting and provide advice and on-Site presence for any ancillary work needed for the operational phase.

12.31 A Biosecurity Management Plan to prevent the spread of INNS plant species. Measures will be taken to prevent INNS from becoming established on-Site.

12.32 There are no additional mitigation measures which need to be implemented to reduce impacts to statutory designated areas during operation. The enhancements to riparian corridors within the Site will improve the quality of water which flows downstream and towards statutory designated areas. Species which make use of the watercourses on-Site, will benefit from these bank-side habitat enhancements.

12.33 The implementation of a GMP will control livestock access across the Site.An aim of the GMP will be to enhance the area of Dean Moor CWS that falls within the Site through a reduction in grazing pressure. This will enable more natural upland habitats to re-establish, and support protected and notable species, including both breeding and wintering birds, and hen harrier.

12.34 The LEMP will also ensure the appropriate maintenance of the Dean Moor CWS to ensure that natural upland habitats can re-establish following reduced grazing activity. The LEMP will set out how PMRP communities will be encouraged to re-establish at Dean Moor CWS. Habitat management during the operational phase, through the implementation of the LEMP will minimise impacts to ecological features and improve biodiversity across the Site, including where solar infrastructure is located. The aim of the LEMP will be to enhance the habitats on-

Site, including hedgerows and riparian habitats, grassland across the Site, peat areas, and watercourses. This will be supplemented by a GMP to achieve a reduction in grazing pressure. This will enable more natural upland habitats to re-establish.

12.35 Any maintenance carried out which may affect sensitive habitats or species will be discussed with a suitably qualified ecologist who will be able to advise on the requirement of any survey or constraint which may be needed before works occur. Any operational phase works will consider the presence of protected species, such as otter and reptiles which may occupy the Site given habitat improvements to hedgerows, and other habitats. Appropriate timing of maintenance works during operation will avoid impacts to species such as bats. The use of lighting will be governed by the ecologically sensitive lighting strategy in accordance with the OLEMP. This will prevent the illumination of important habitats such as woodland and hedgerows

12.36 Mitigation during decommissioning will be provided by the implementation of a Decommissioning Management Plan, which will be substantially in accordance with the FDMP (ES Appendix 5.4). This will set out how works will be undertaken to reduce impacts to habitats and species; protect statutory and non-statutory areas; and how disturbance and habitat fragmentation will be avoided. As the Site will have evolved during operation it is likely to contain a greater species diversity, the DMP will also demonstrate how any impacts of mortality and disturbance will be avoided, especially if works are required to be carried out during sensitive periods (e.g. nesting season).

12.37 The DMP will take into account potential effects to the River Derwent and Bassenthwaite Lake SAC and the River Derwent and Tributaries SSSI.

12.38 The FDMP provides a framework of mitigation measures to avoid impacts on non-statutory designated sites, such as the Dean Moor CWS and SRVMP K3. The FDMP provides a framework of measures to avoid and minimise impacts to habitats on-Site during decommissioning. Mitigation measures identified, as appropriate, for species during construction are likely to be relevant during decommissioning and are provided via the FDMP.

12.39 Provided all mitigation is included, the residual effects on statutory designated areas, in particular the River Derwent and Bassenthwaite Lake SAC and River Derwent and Tributaries SSSI, and the Solway Firth SPA will be not significant. Potential effects to European sites are presented in the sHRA (Appendix 8.7).

12.40 Notwithstanding the implementation of the OCEMP (Appendix 5.1), there will be short-term negative effects on a small part of Dean Moor CWS, which is considered significant at the Local Level. Following procedural measures outlined in the OCEMP (ES Appendix 5.1) construction works will have no significant residual effects to the SRV.

MP K3 or other non-statutory designated areas.

12.41 There are no significant residual effects to habitats during construction.
Species

12.42 Following the measures set out in Section 8.6, there will be no significant residual effects to species during construction.

12.43 There will be no significant residual effects on statutory designated areas, in particular the River Derwent and Bassenthwaite Lake SAC and the River Derwent and Tributaries SSSI.

12.44 The implementation of the Landscape and Ecology Plan ('LEP') (to be substantially in accordance with the Landscape Strategy Plan) in conjunction with the cessation or relaxation and management of grazing,as well as other enhancements and management measures set out in the OLEMP will benefit habitats across the Site. The Proposed Development will have a long-term, positive effect on habitats at the Site level. This effect will be not significant.

12.45 The Council considers it crucial to ensure a suitable monitoring regime is in place for the lifetime of the development. The Council would expect such a monitoring fee to be secured either through the detailed provisions of the DCO itself or a legal agreement.

Conclusion

12.46 The Applicant is requested to provide a detailed response to the issues and comments that have been raised by the Councils Ecology Consultant with regards to the sHRA, BNG and Protected Species.

12.47 Subject to a satisfactory response to the outstanding issues it is considered that, with the implementation of appropriate mitigation measures, ecological benefits and biodiversity net gain arising from the development can be achieved through a Framework LEMP.

13. The Water Environment and Flood Risk

13.1 The relevant Allerdale Local Plan Policy is ALP1 Policies:

- Policy S29 Flood Risk and Surface Water Drainage
- Policy S35 Protecting and Enhancing Biodiversity and Geodiversity
- Policy S36 Air, Water and Soil Quality

13.2 Flooding occurs naturally but can also result from human interference with natural processes such as changes to river channels or their flood plains, increases in runoff from land, or blocked drainage systems. Flooding becomes a problem when it has an adverse impact on people, property, infrastructure or the environment. Policy S29 ALP1 sets out that developments should be avoided in locations that would be at risk of flooding or where it would increase the level of flooding elsewhere. Development within areas at the greatest risk of flooding, as identified within the Allerdale Strategic Flood Risk Assessment (SRFA) and/or Lead Local Flood Authority (LLFA) Local Flood Risk Management Strategy, will be strongly

resisted. In order to minimise the risk to people, property and places from flooding, the Council will:

a) Assess all proposed development sites through both the Site Allocations process and development proposals against the SFRA and/or LLFA Local Flood Risk Management Strategy and ensure that new development is fully compliant with the national policy and guidance.

b) Ensure that developments identified in national policy as requiring a Flood Risk Assessment, should ensure that as a minimum, the scale and nature of the assessment should be appropriate with the development proposals and should be completed in accordance with national policy and guidance.

13.3 Policy S35 ALP1 Protecting and Enhancing Biodiversity and Geodiversity is relevant with regard to water quality supporting protected habitats. Also see Chapter 8 of the ES Biodiversity.

13.4 Policy S36 ALP1 Air, Water and Soil Quality, sets out that the quality of air and water resources within the Plan Area will be protected and opportunities for enhancement will be pursued. Unless adequate mitigation measures can be secured, development proposals will be resisted that would have a demonstrable direct and/or indirect adverse impact on;

a) Air quality and/or atmospheric conditions;

b) The characteristics of surrounding soils and substrata - through either

physical (compaction, erosion) or chemical (pollution, contamination);

c) The chemical composition and quality of waterbodies in the Plan Area;

d) The Water Framework Directive and the status of the watercourse. Whilst having regard for the economic and other benefits of the best and most versatile land, where development is considered necessary, the Council will seek to ensure the use of poorer quality land in preference to that of a higher quality.

13.6 The Scoping response from the Planning Inspectorate scoped in Water quality impacts on water resources from siltation of runoff and pollution events; and Water quality impacts on designated sites, however scoped out Flood Risk and surface water run-off from soil compaction.

13.6 The Cumberland Local Lead Flood Authority (LHA) have reviewed the Environmental Statement: Appendix 2.4 – Flood Risk Assessment and Outline Drainage Strategy (ODS) (in 3 parts) and previously had extensive discussions and meetings with the applicant to establish the requirements and provisions to include in the submission. It is considered the FRA & ODS is a very comprehensive document and includes all the necessary measures and procedures as previously discussed and agreed. It is considered that surface water management the development will not increase flood risk to the site nor downstream. The pollution and sediment / silt management aspects are also covered off to provide the necessary treatment which is especially important during the construction phase. It is noted that a final Drainage Strategy is proposed to be submitted as a DCO Requirement.

13.7 The Outline Construction Environmental Management Plan (OCEMP) includes the necessary measures for protecting the Site from flooding, controlling the risk of pollution, and the ingress of material such as soil, silt, oil, and chemicals. Preparation of the final Construction Environmental Management Plan (CEMP) shall be secured by a DCO Requirement and shall be submitted for approval by the Council.

13.8 The Cumberland Local Lead Flood authority set out that the Outline Construction Environmental Management Plan (OCEMP) includes the measures and procedures discussed and agreed in pre-app discussions.

13.9 The OCEMP includes the necessary measures for protecting the Site from flooding, controlling the risk of pollution, and the ingress of material such as soil, silt, oil, and chemicals.

13.10 Preparation of the final Construction Environmental Management Plan (CEMP) shall be secured by a DCO Requirement and shall be submitted for approval by the Council. The construction of any part of the Proposed Development must be carried out in accordance with the approved CEMP for that part.

13.11 The proposal to use the EA’s opensource Flood Risk data and mapping to design and suitable surface water strategy is accepted.

13.12 The LLFA is satisfied with the proposed 8m minimum exclusion areas from the top of the bank of watercourses/waterbodies in accordance with LLFA and EA recommendations, along with additional Site management mechanisms to protect watercourses. It is accepted that the design parameters secured by the Works Plans, in conjunction with management plans such as the OCEMP, and the LLFA secondary consenting procedures will ensure effective protection of the water environment.

13.13 The LLFA is satisfied that the provisions of the ODS and subsequent DS (to be submitted for approval by the LLFA) will provide the necessary features and controls to manage flood risk. The various management plans are considered a suitable way to monitor and manage flood risk conditions.

13.14 Targeted SuDS features, as proposed within the FRA and ODS, are appropriate and account for future climate change. It is recognised that the final DS will be need to be subject to LLFA consultation and approved by the Council.

13.15 The LLFA agrees with the applicant's understanding of the shared position. The LLFA's OWC procedure will ensure the impact from watercourse crossings are minimised and that the works will comply with a suitable method statement.

13.16 It is anticipated there can be positive effects on watercourses as habitats and on water quality, due to the 8m buffer being applied, new / improved green infrastructure, the reduction of intensive grazing, annual monitoring of planting and BNG, and ongoing management. There is in principle agreement that this can be achieved via the foundation provided by the LSP and the OLEMP (as assessed in the BNG Report) subject to the content of the final versions of these to be provided as a DCO Requirement. It is anticipated to be agreed that the OLEMP secures the management and monitoring of the planting and grazing on-site. This approach has been proposed to be sensitive to the potential impacts on water quality, to prevent overgrazing, and to protect the buffer strips adjacent to watercourses.

13.17 It is agreed that the methodology of the WFD Assessment is appropriate and that the WFD will be reviewed and updated once the detailed design of the Proposed Development is confirmed.

14. Transport and Access

14.1 ALP1 Policy S22: Transport Principles, is the relevant policy and specifies that new development will be required to improve accessibility and movement in the local area reflecting the Local Transport Plan; ensure they can be accessed safely and that they do not compromise the safety of any transport route, including railway lines and level crossings; make provision for pedestrians and cyclists to be given the highest priority within town centres and new development, and facilitate links with public transport nodes and hubs; where necessary be accompanied by Transport Assessments/Travel Plans in accordance with local and national guidance; protect and, where appropriate, enhance or create new designated public rights of way; be required to protect, enhance and capitalise upon sustainable transport links offered by green infrastructure corridors wherever possible; and be required to provide adequate levels of car parking, cycle facilities, and where appropriate incorporate charging points for electric and hybrid vehicles.

14.2 Traffic, Access, Noise and Vibration – Scoped out of the ES but the Local Highway Authority (LHA) are satisfied that the necessary data, detail of the temporary and permanent proposals and mitigation measures can be covered off in a TA and CTMP as proposed and recommended as Requirements in the DCO.

14.3 The LHA are satisfied that interests of the road users and the LRN itself are protected and mitigated by the implementation of suitable CTMP and CWTP. These can be implemented by Requirements in the DCO.

14.4 Further details of the permanent accesses for the operational phase are required. This requirement can be secured by way of Requirement and is embedded in the CTMP and OMP.

14.5 The LHA agrees with the applicant's understanding of shared position statement. The routing proposals set out in the OCTMP (and future CTMP) have been agreed in principle. The final proposals are subject to further consultation with the LHA.

14.6 It is agreed that a pre-construction Road Construction Survey is appropriate, as recommended by the LHA, and that this is secured by the OCTMP, but will be agreed with the LHA to inform the final CTMP.

14.7 The development and submission of the CTMP and OMP will give the LHA a suitable opportunity to review the final proposals. The LHA agrees with the applicant's understanding of shared position statement. The OCTMP has provisions to include the cumulative impact of other nearby developments (including Lostrigg Solar). The CTMP will therefore reflect the wider and cumulative impact.

14.4 The final CWTP will be provided as part of the final CTMP and as such will be subject to the same prior consultation with the LHA to inform the content ahead of submission to the Council for approval as a DCO Requirement.

14.5 It is considered that matters relating to transport during construction, operation and decommissioning can be suitable controlled by DCO Requirements so as to accord with Policy S22 ALP1

15. Socio Economics

15.1 The relevant Allerdale Local Plan (Part 1) policies are:

- Policy S2 Sustainable Development Principles
- Policy S3 Spatial Strategy and Growth
- Policy S5 Development principles
- Policy S6 Area Based
- Policy S12 Land and Premises
- Policy S13 Energy Coast innovation Zone
- Policy S14 Rural Economy
- Policy S15 Education and Skills
- Policy S19 Renewable Energy and Low Carbon Capture
- Policy S20 Nationally Significant infrastructure Projects

Key Local Issues

15.2 ALP1 Para. 40 addresses that Allerdale area is largely dominated by manufacturing and construction, the public sector and the retail and service sector (including hotel, leisure and tourism sectors). In the rural north, agriculture is still and important sector for employment and the economy ALP1 Para 41 sets out that 'Reducing unemployment and worklessness and diversification of the rural economy are seen as key economic challenges'. The socio-economic assessment considers the effects arising from employment generation, impacts on local services and facilities, comprising local accommodation services and Gross Value Added (GVA).

15.3 Although any construction jobs created will be temporary, they are still acknowledged to represent a positive economic effect for a period of time.

15.4 Whilst the Council accepts that the proposed development would not contribute significantly to the wider economic aspirations for the Borough, which have been outlined above, it would be an important opportunity to utilise an existing local workforce. The Council suggests that the strategy could be more ambitious in respect of the number of people employed during construction. Furthermore, there is a strong local supply chain, labour force and education and training facilities within Cumberland that could support delivery of the project, and this could be maximised through the detail provided through Requirements. The Council would welcome further discussion with the Applicant on this matter and the consideration of an Employment and Skills Plan.

15.5 Overall, in the Council's view, the local impacts associated with construction employment in the construction and decommissioning phases would be neutral

(albeit there would be a positive local impact during those phases which is recognised and supported, subject to the detail contained within Requirements (skills, supply chain and employment)).

15.6 It is not possible to accurately quantify the level of construction workforce spending from direct employee expenditure over the construction phase. Whilst local businesses that are accessible to the construction site may experience greater benefits from employee spending, the spending impact on the local economy would be indirect, temporary and negligible/minor beneficial. In the Council's view the local impacts associated with construction workforce spending would be neutral.

16. Human Health and Amenity

16.1 Although scoped out of the ES it is accepted that lighting can be secured through the CEMP for construction and the LEMP/OMP for operations.

16.2 It is accepted that Glint and Glare has been considered with regard to sensitive receptors including dwellings, road networks, PRoW and aviation. The final planting and landscaping scheme can also address mitigation for glint and glare in order to negate any adverse impacts.

16.3 It is agreed by the Councils Environmental Protection Team that the construction OCTMP and OCEMP will provide measures to suitably address noise effects and provide suitable mitigation subject to the Council's review of the final CTMP and CEMP to be provided as Requirements to the Council's approval. It is noted that the Noise and Vibration Impact Assessment (NIA) and the DCO Requirement for an updated assessment will be based on final layout and design specifications for the PCS Units across Works No.1. This will ensure sensitive siting of equipment in relation to Noise Sensitive receptors (NSR) due to mitigation of Works Plans. Noise effects from maintenance activities can be suitable controlled by the CEMP.

16.4 It is anticipated by the Council that the proposed Development will not cause significant amounts of waste during construction or decommissioning. The appropriate control of waste for these phases have been outlined in the relevant management plans and can be secured by DCO Requirements.

16.5 The relevant control documents the OCEMP, OOMP, FDMP could provide appropriate mitigation for the potential effects to air quality during the construction and decommissioning phases. The OOMP provides appropriate mitigation for the potential effects for air quality during the operational phase.

16.6 It is agreed that the approach of securing ground investigation post-consent is appropriate to characterise the historic mine entries within the site and a and a strategy for remediation and mitigation to be agreed with the Council and the Minerals Waste Authority.

16.7 It is agreed in principle that as long as soil resource management best practice is carried forward for maintenance activities in the OMP, alongside good ecological

management via the LEMP, the Proposed Development has potential to provide benefits for soil health over the operational phase.

17. Draft Development Consent Order

17.1 The Council has reviewed the Draft DCO [APP-] and has commented via a topic-by-topic basis above. At the time of writing, discussions between the parties on the detailed wording of the draft DCO are continuing.

18. Conclusions

18.1 This LIR has considered the potential impacts of the Dean Solar Farm NSIP at the local level in respect of the Cumberland Council (Allerdale) administrative area, within which the whole development will be located. It has considered positive, negative and neutral impacts, within the context of its knowledge and understanding of the area.

18.2 While it is noted that the delivery of renewable energy of this nature is in accordance with key strategic policies of the Allerdale Local Plan, offering in principle support for such development, this is subject to detailed considerations regarding the impacts of the proposed development.

18.3 The ExA will need to be satisfied that any residual impacts arising from the proposed development can be outweighed by the public benefits brought about by the proposed development. Of the matters that fall within the Council's jurisdiction positive local impacts have been identified in terms of contribution to the production of renewable energy in the Cumberland Council area. Ecological benefits and biodiversity net gain arising from the development are also achievable subject to a satisfactory resolution to the outstanding issues and ongoing engagement between the Council and Applicant on the detailed content of the Framework LEMP.

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